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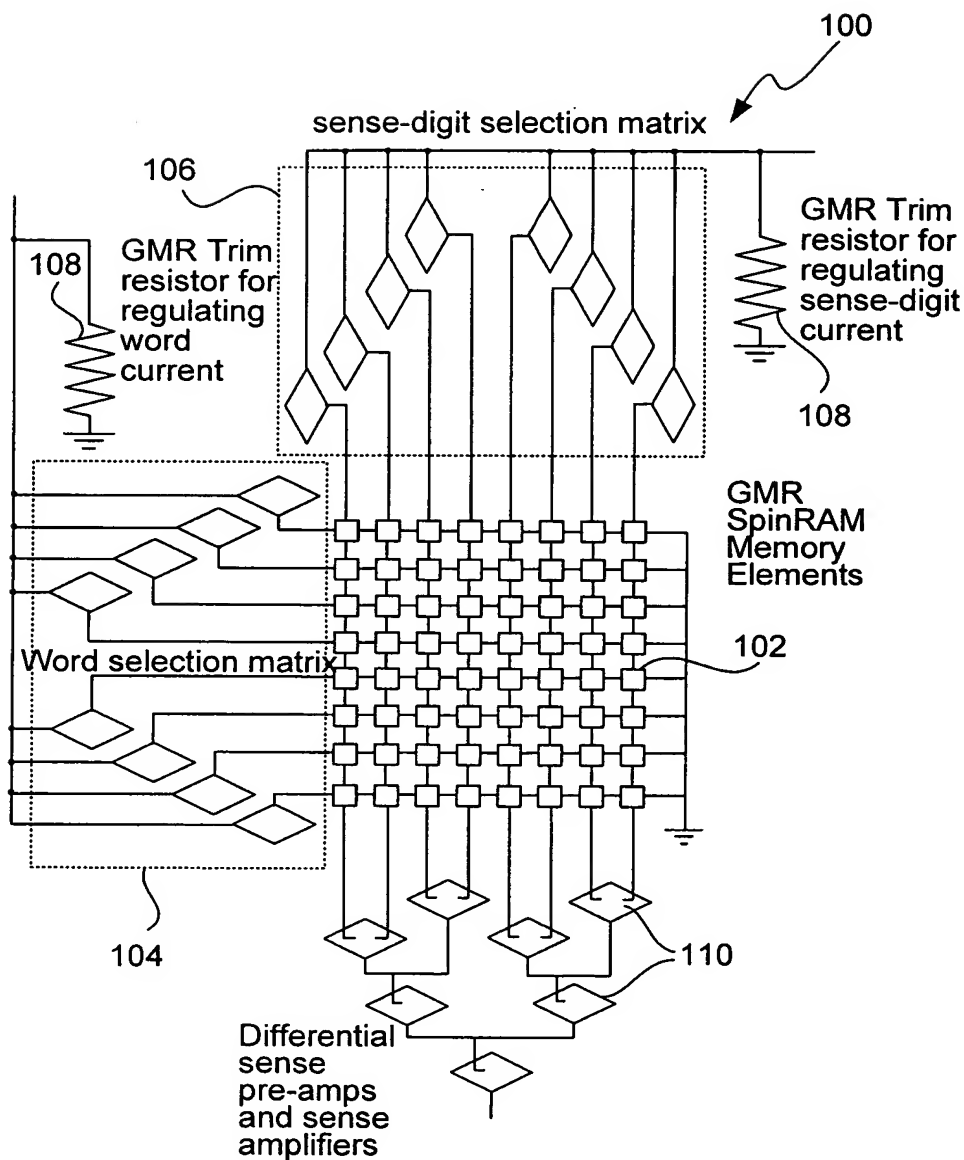


FIG. 1

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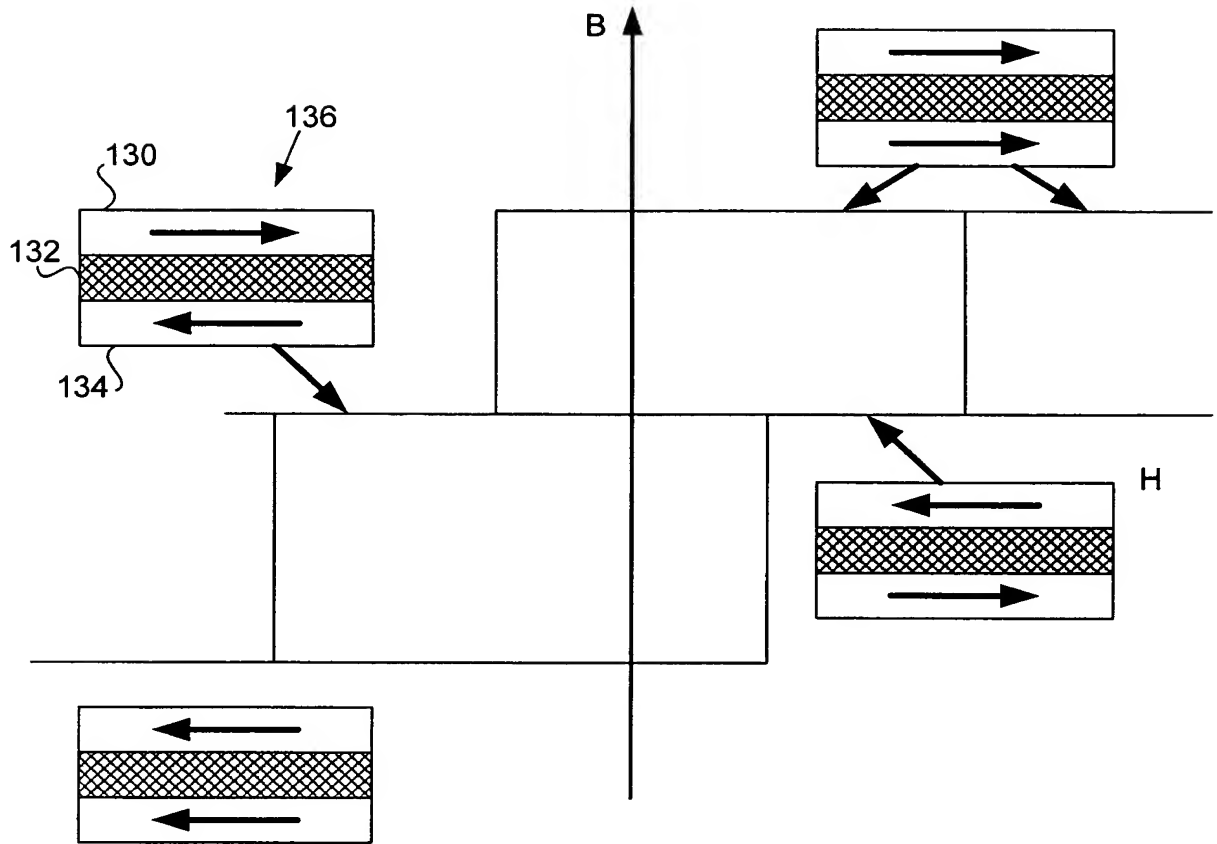


FIG. 2

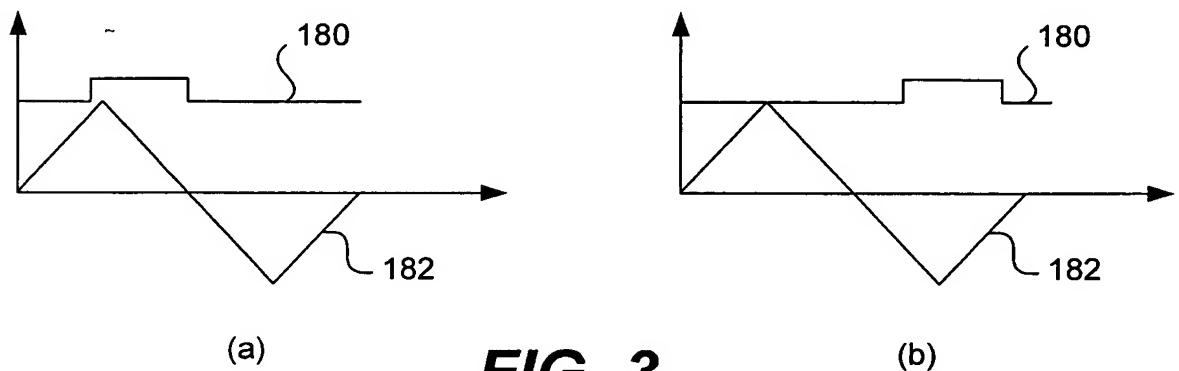


FIG. 3

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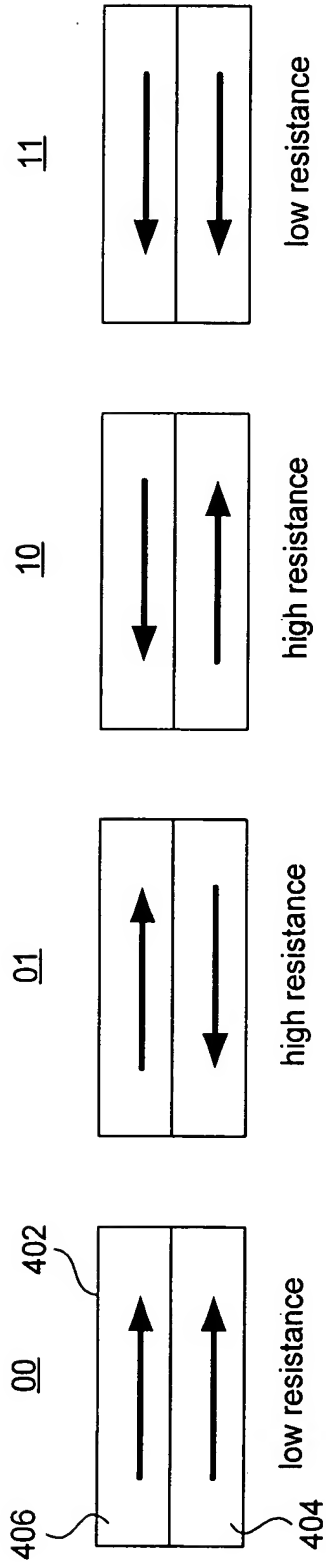
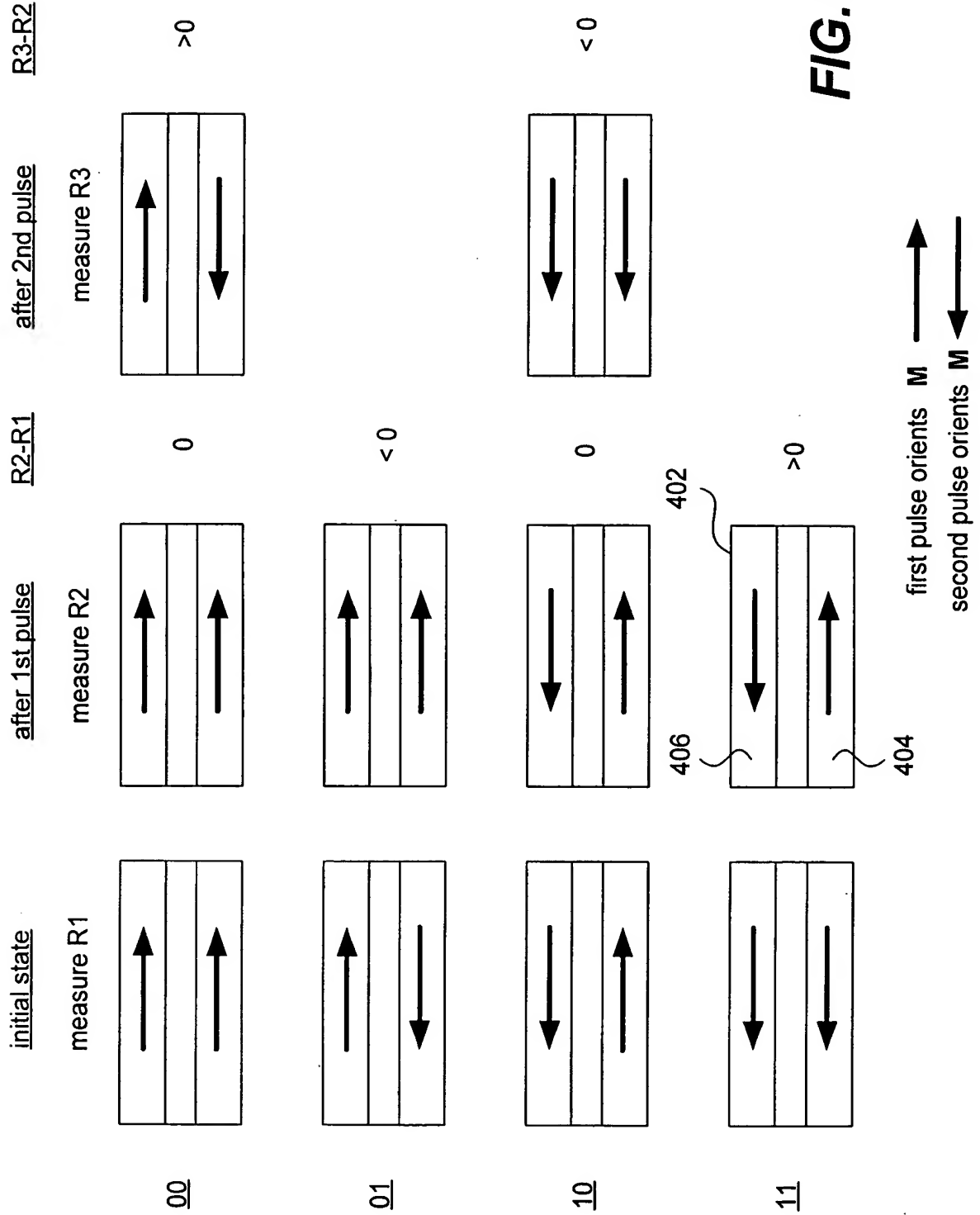


FIG. 4

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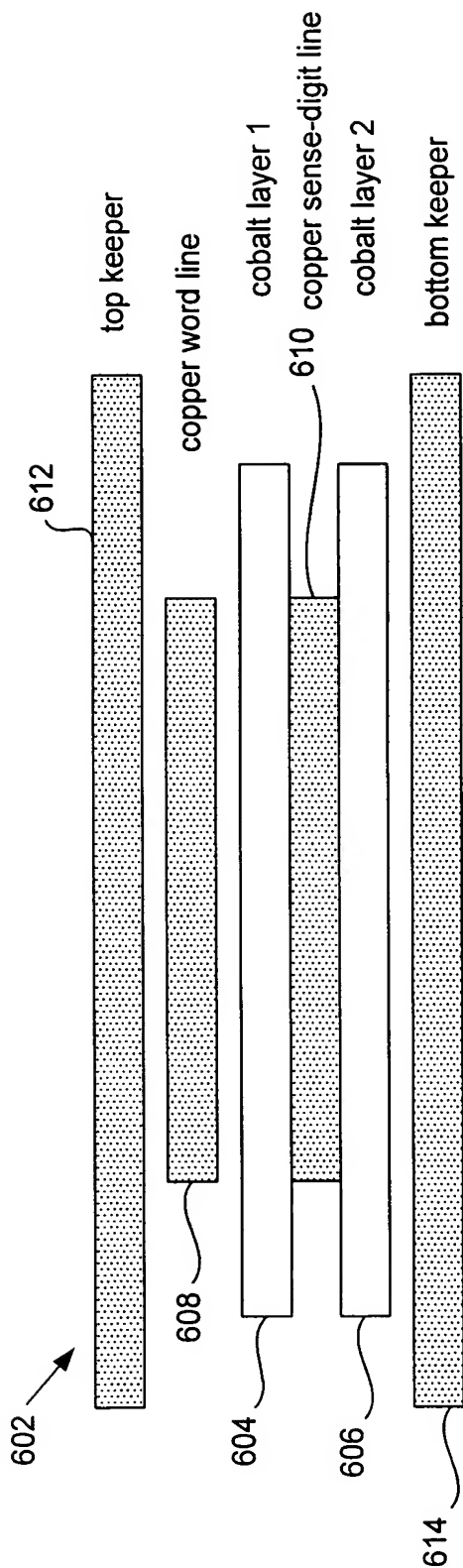


FIG. 6

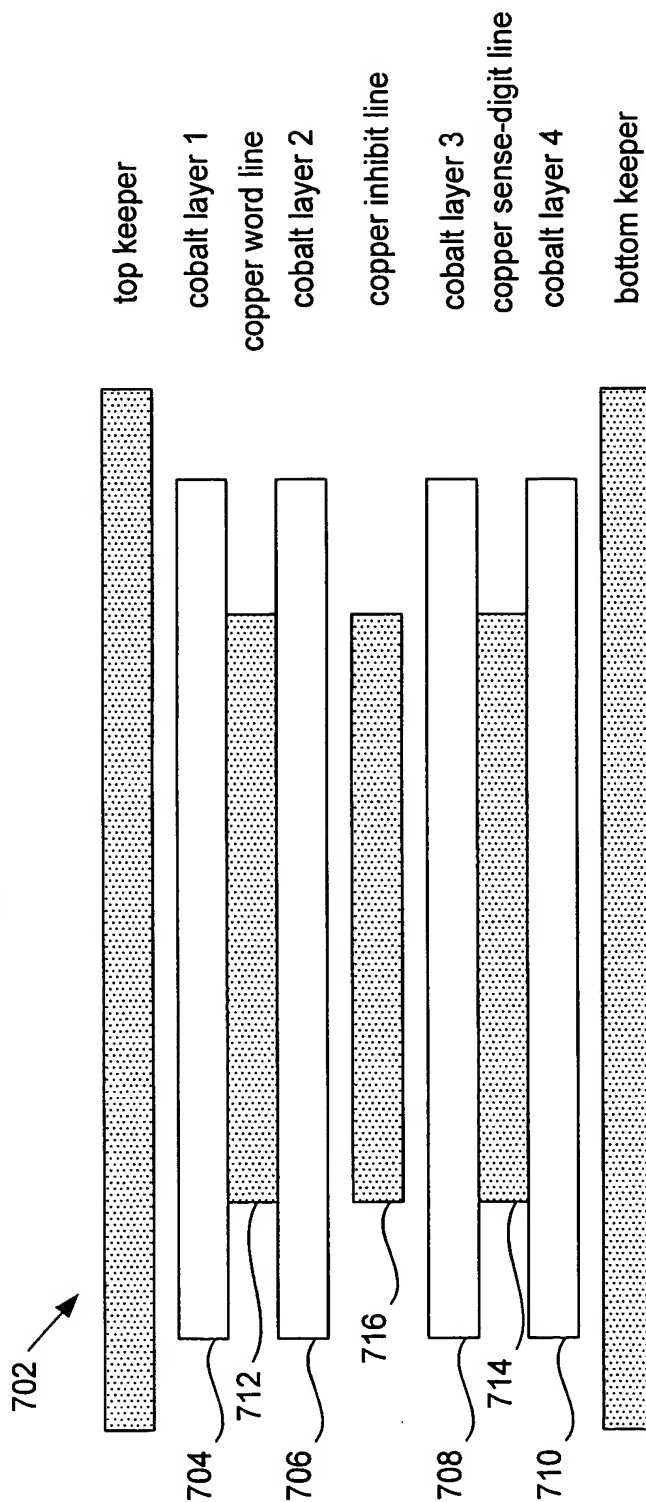


FIG. 7

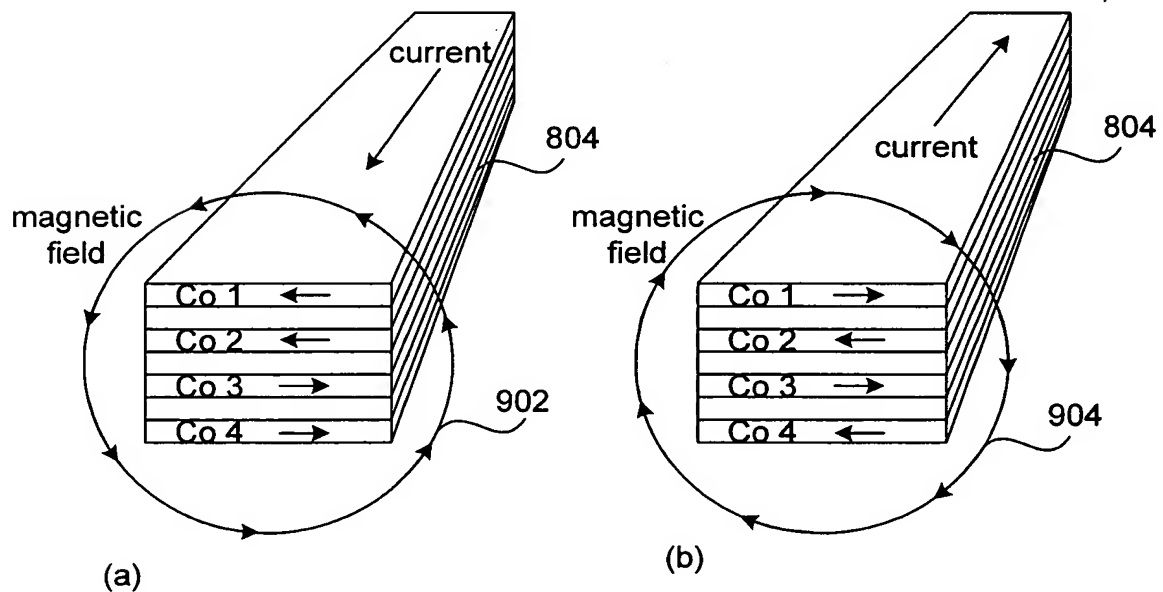
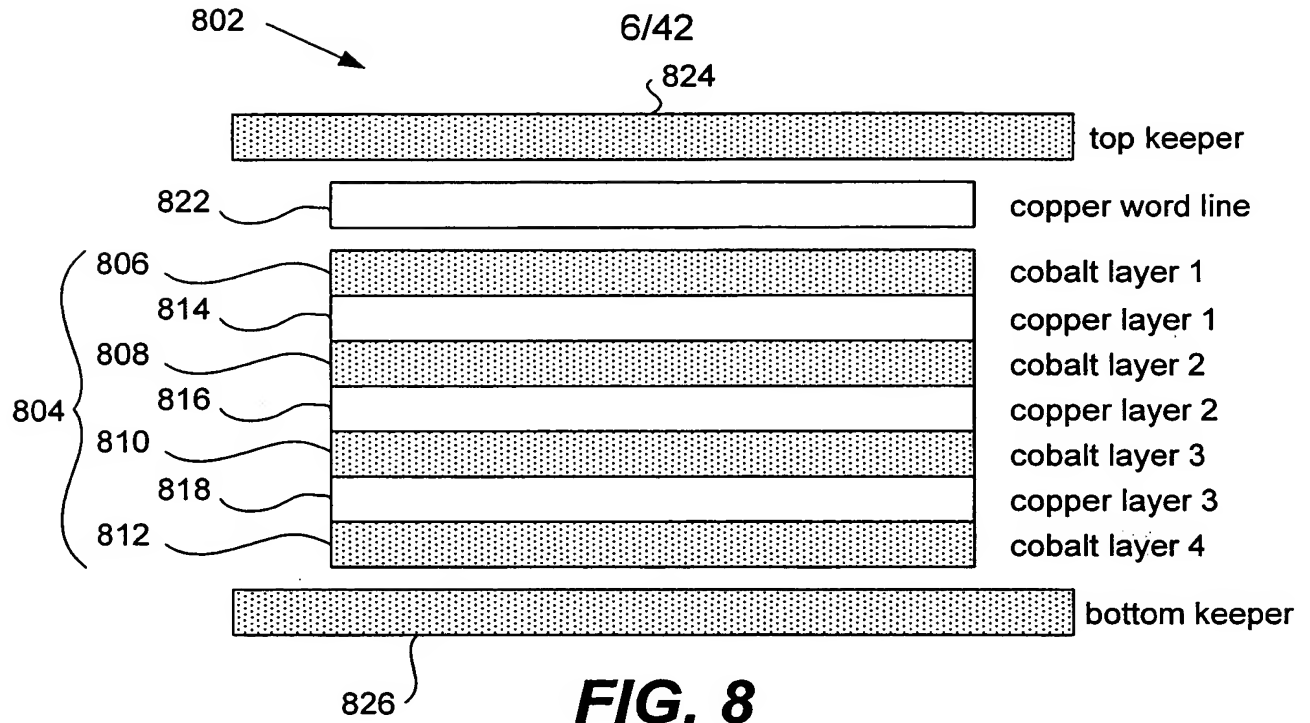


FIG. 9

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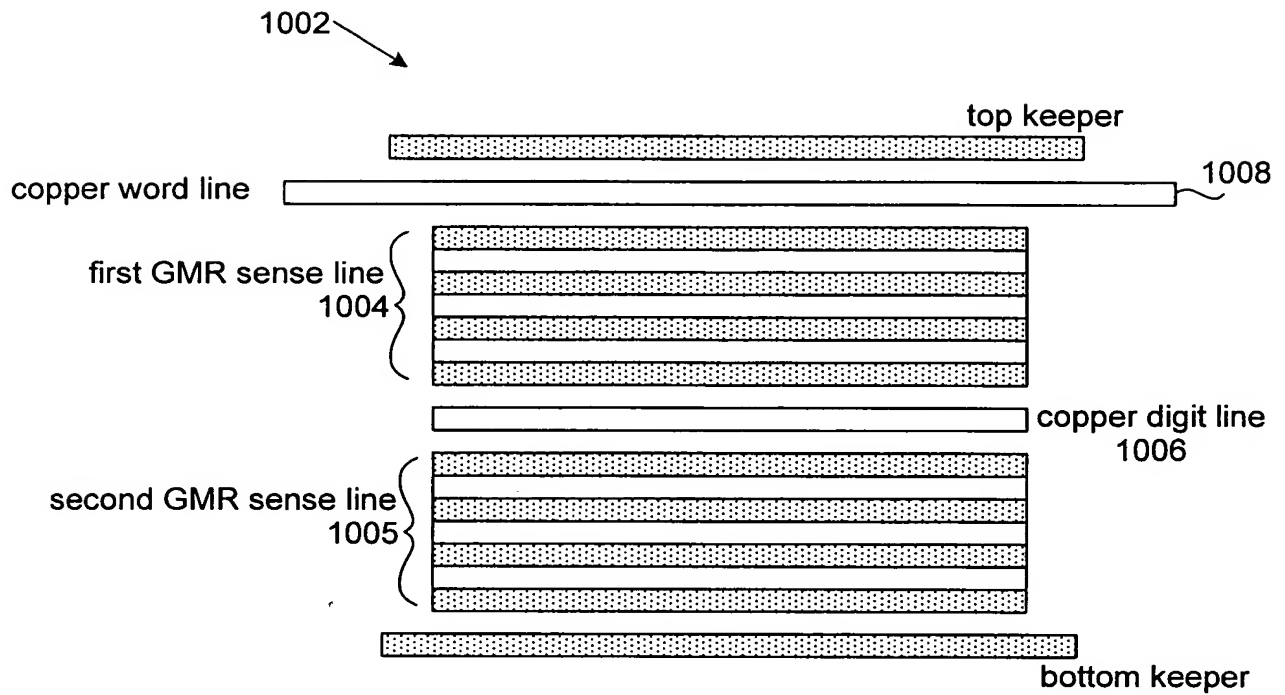


FIG. 10

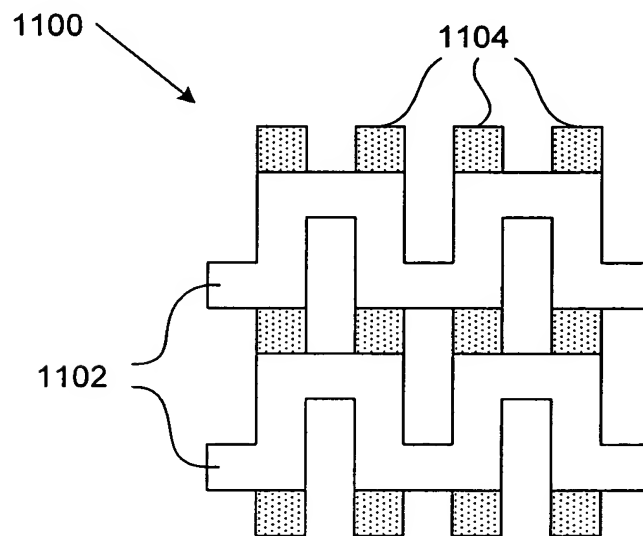


FIG. 11

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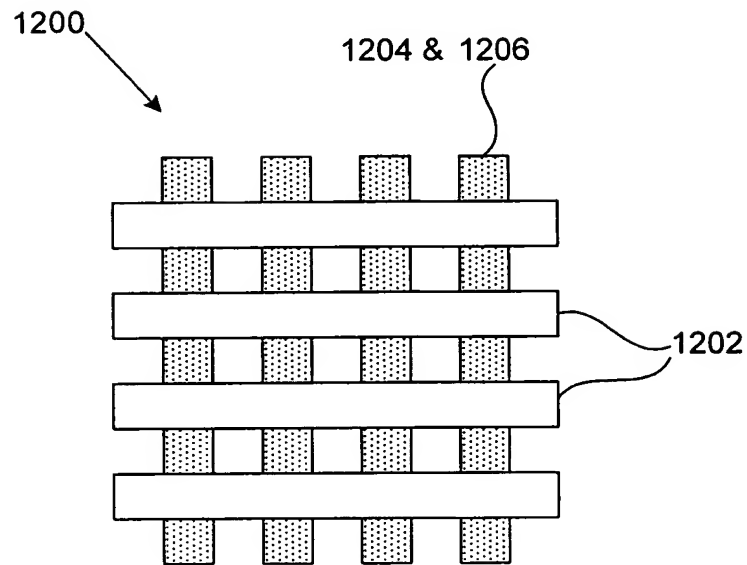


FIG. 12a

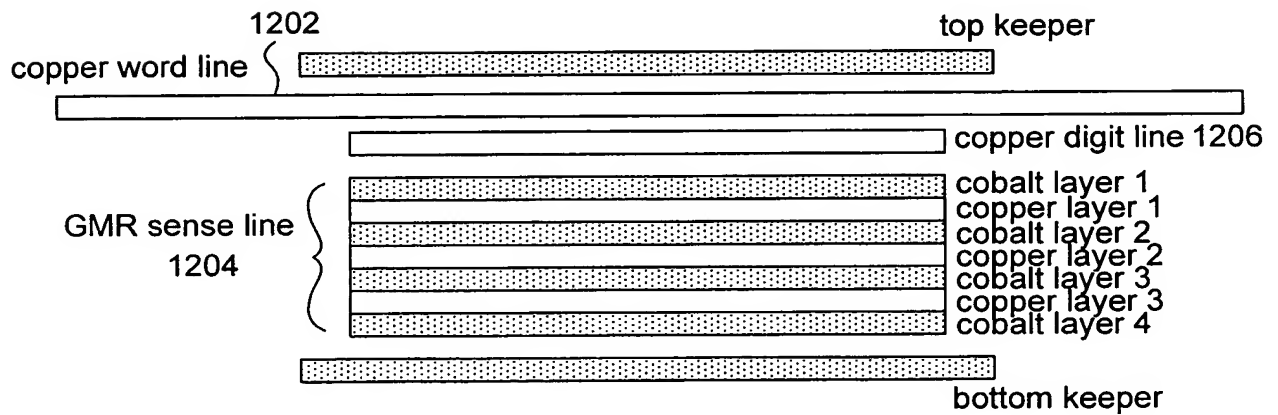


FIG. 12b

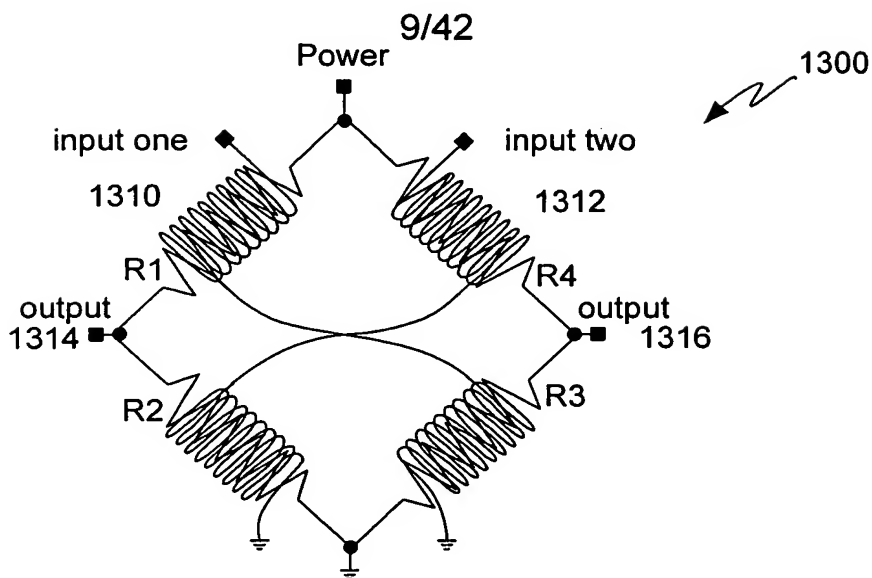


FIG. 13

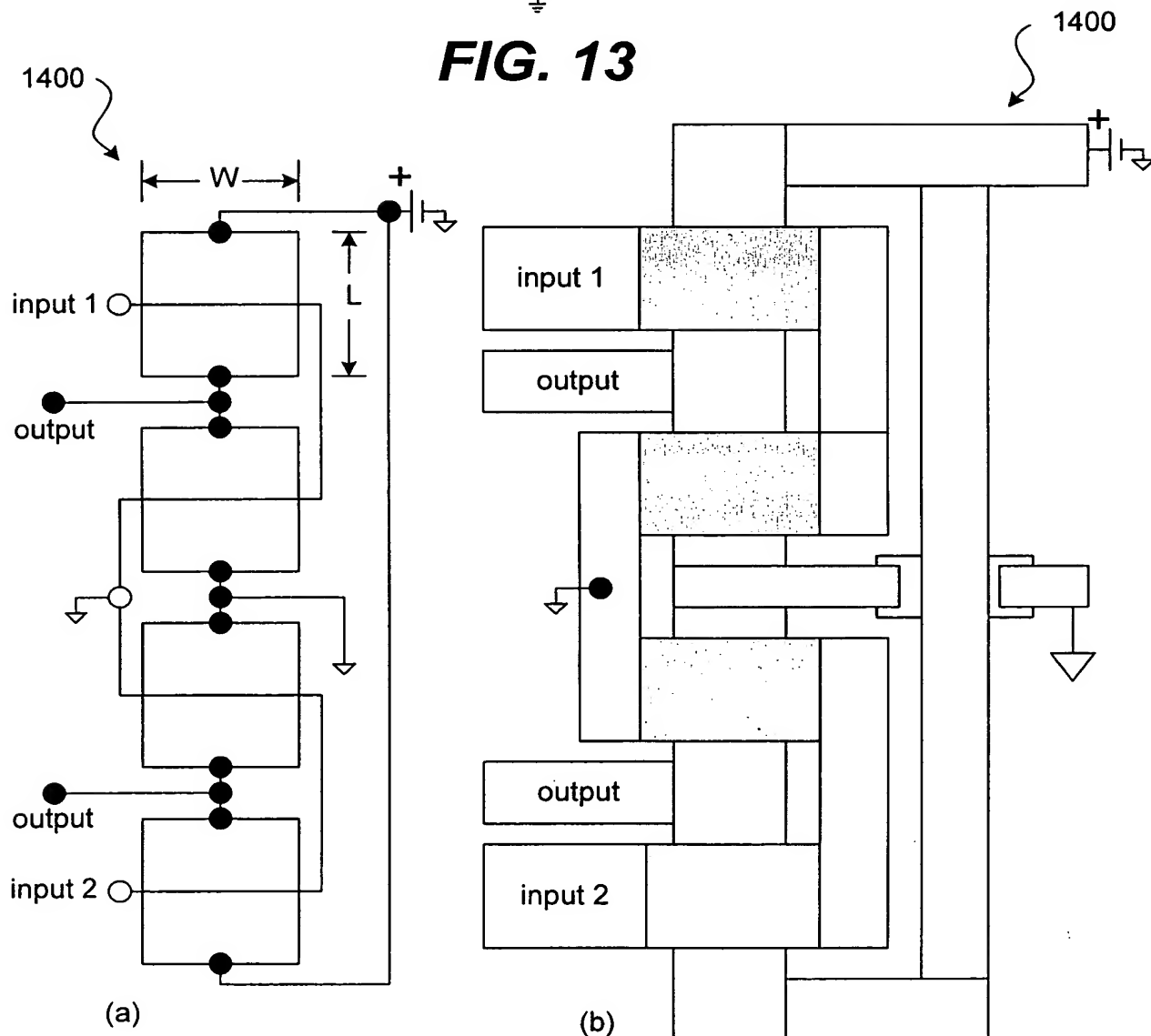


FIG. 14

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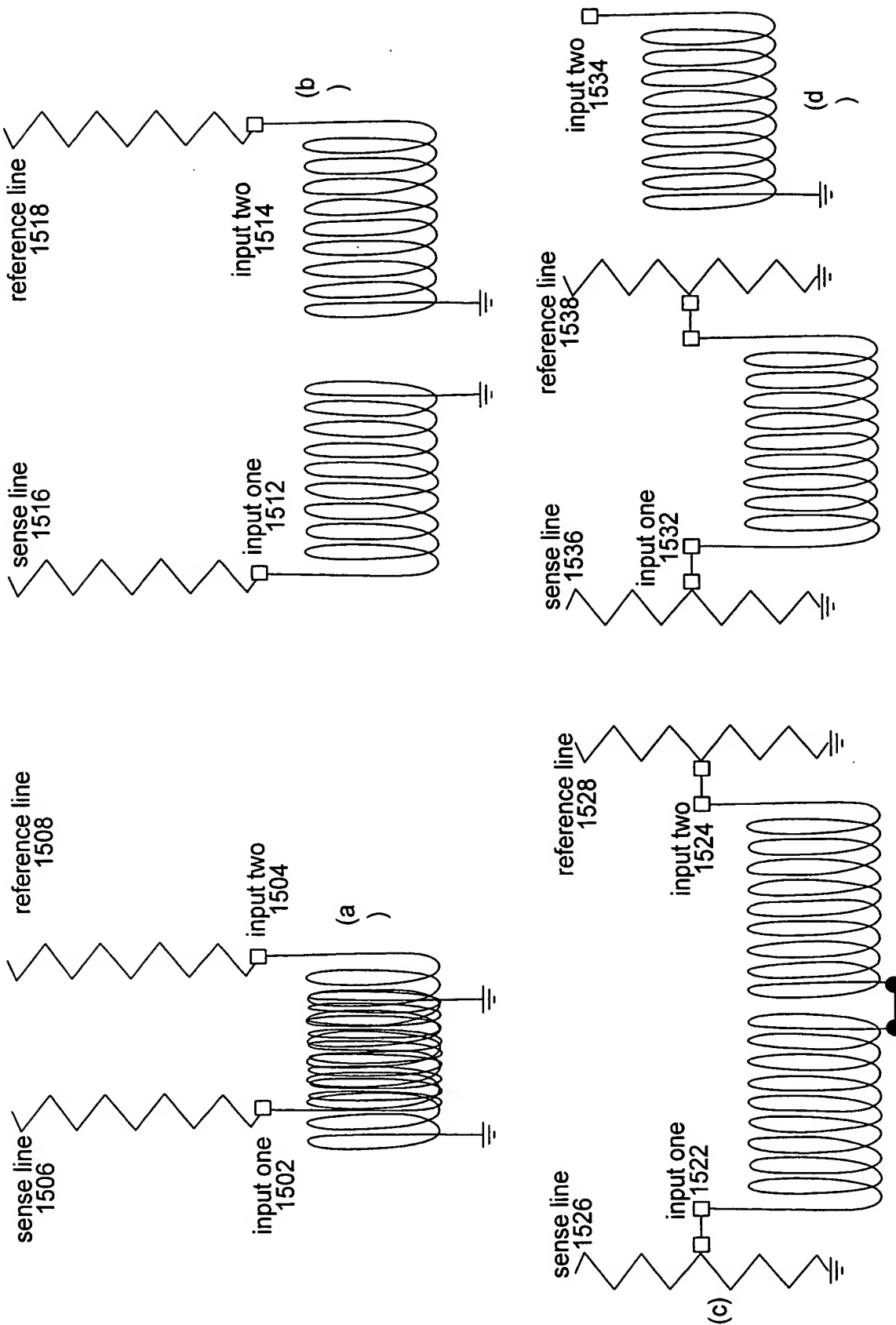


FIG. 15

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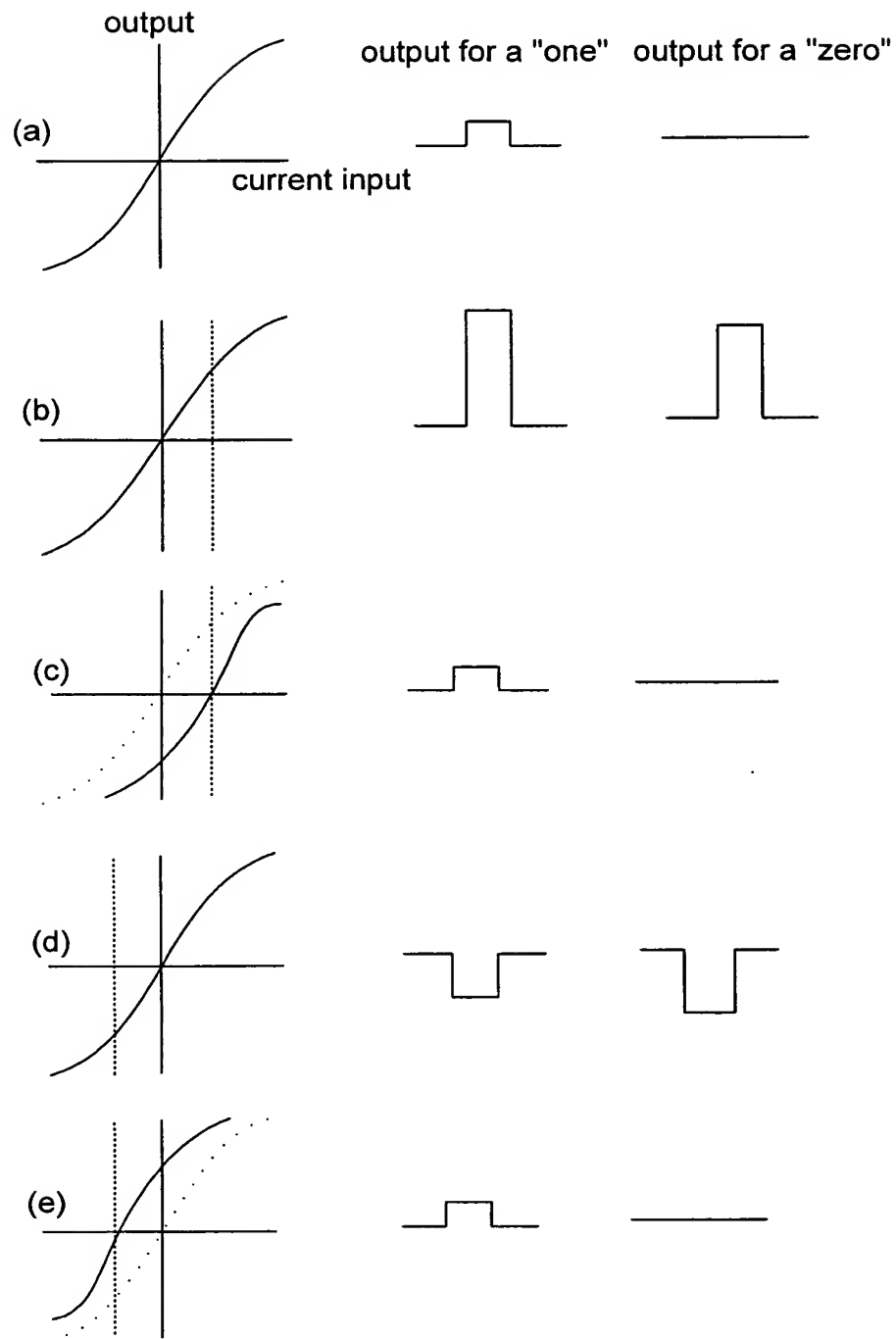


FIG. 16

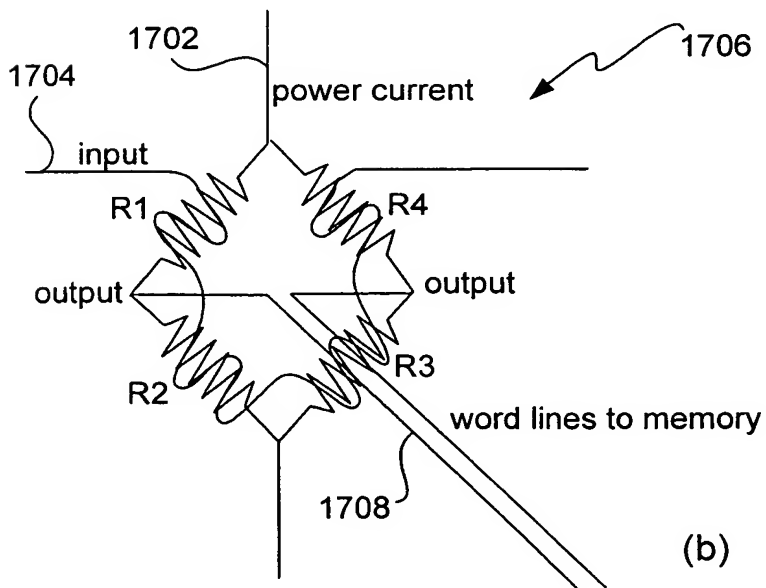
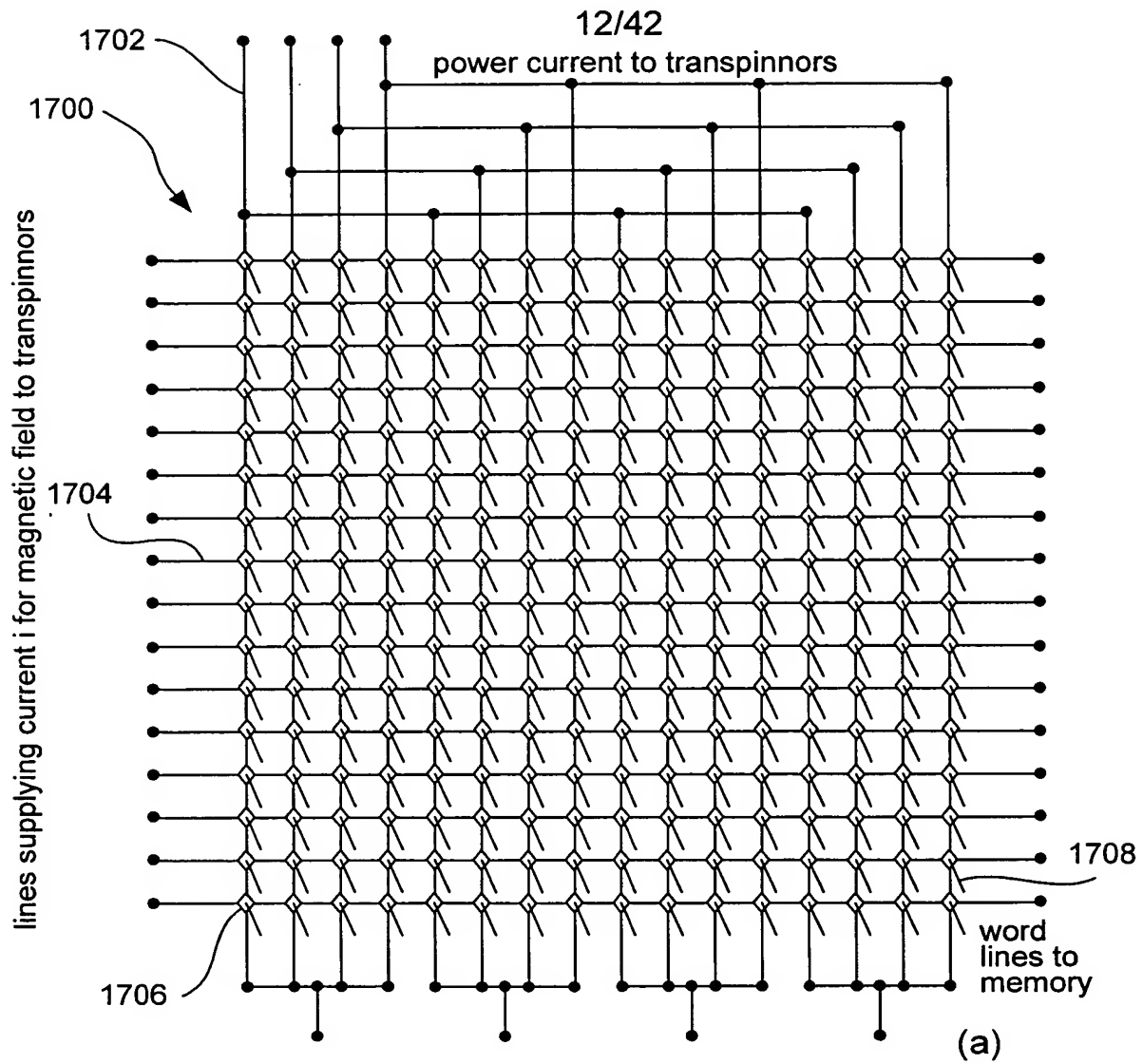
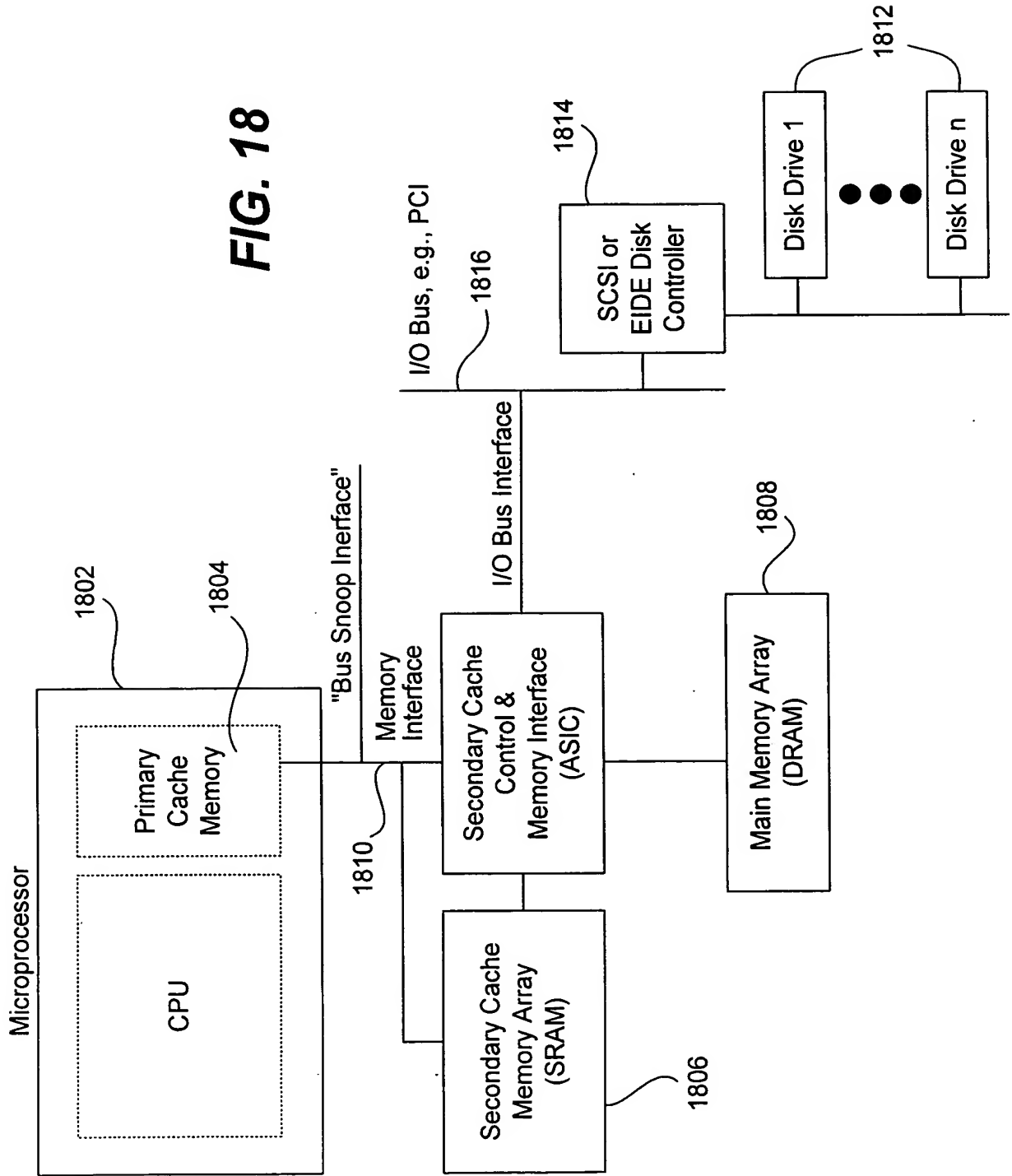


FIG. 17

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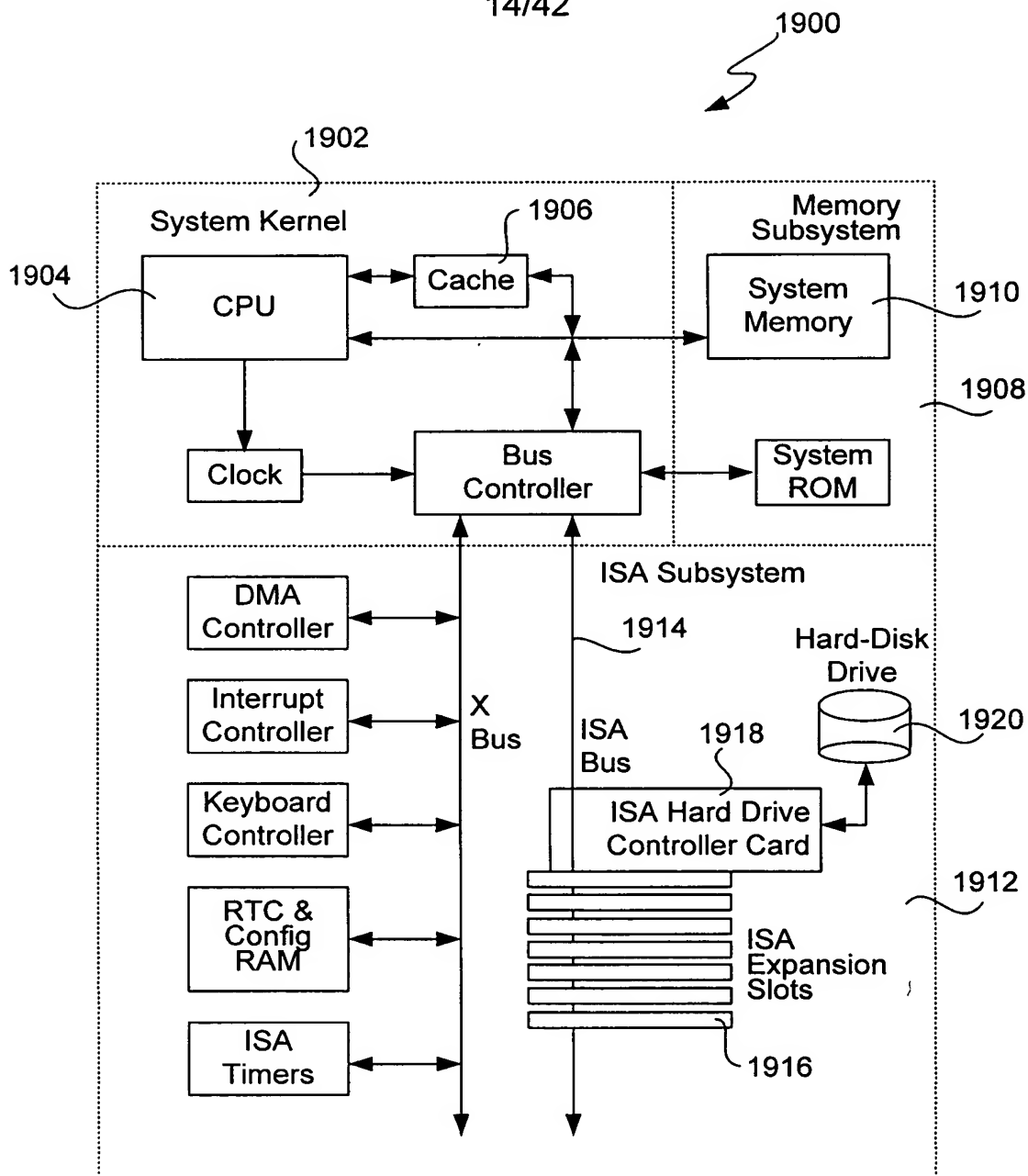


FIG. 19a

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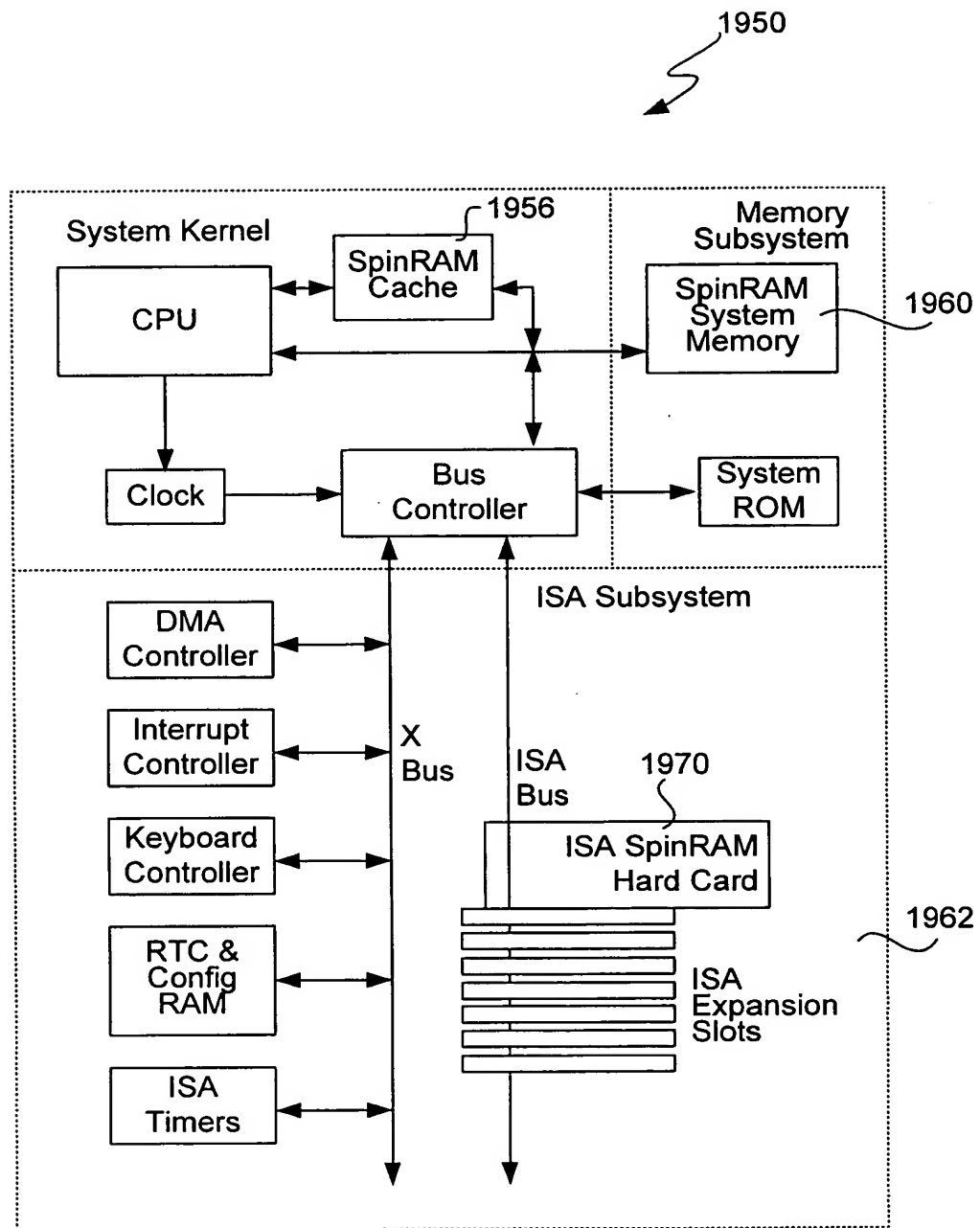


FIG. 19b

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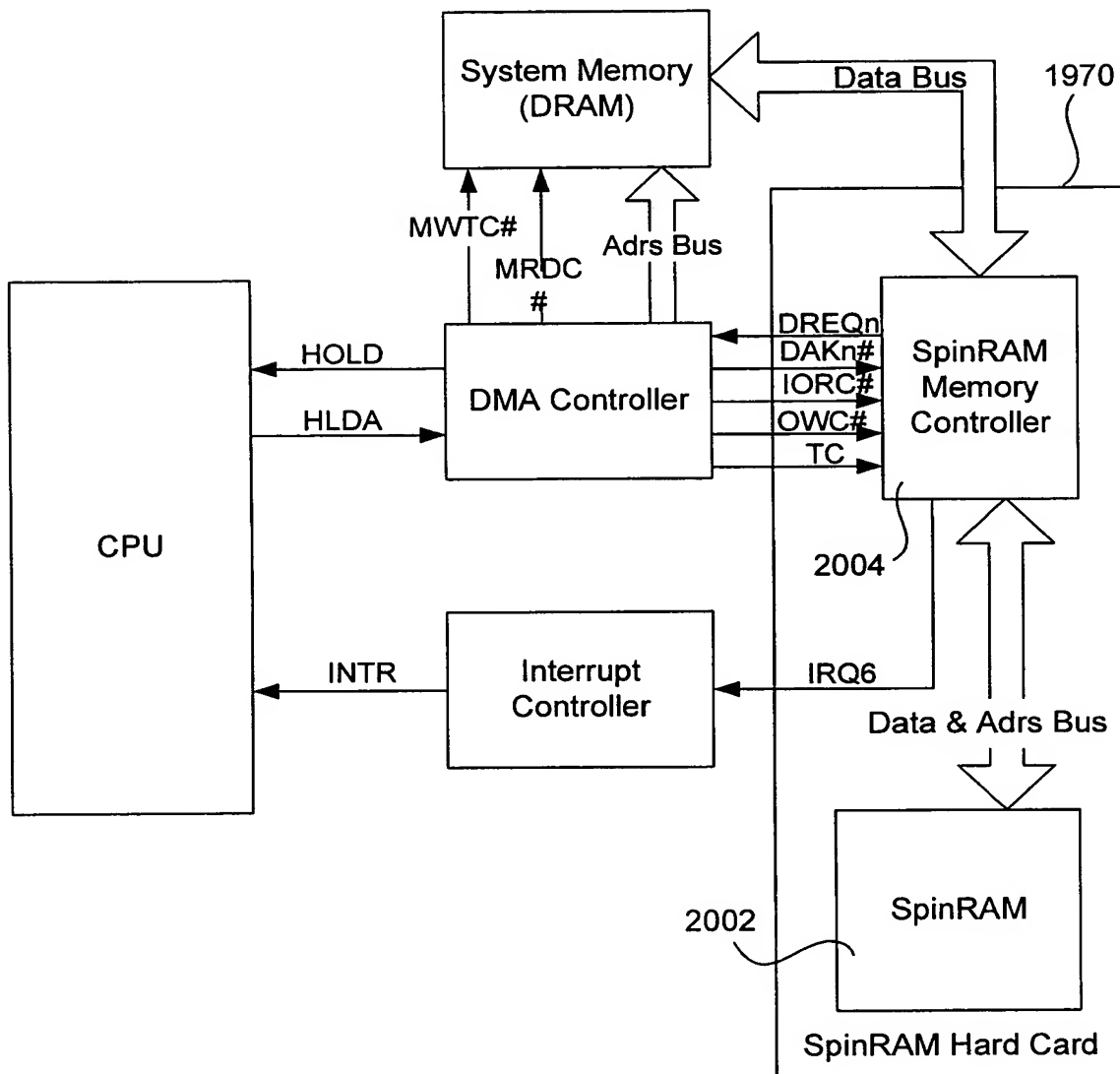


FIG. 20

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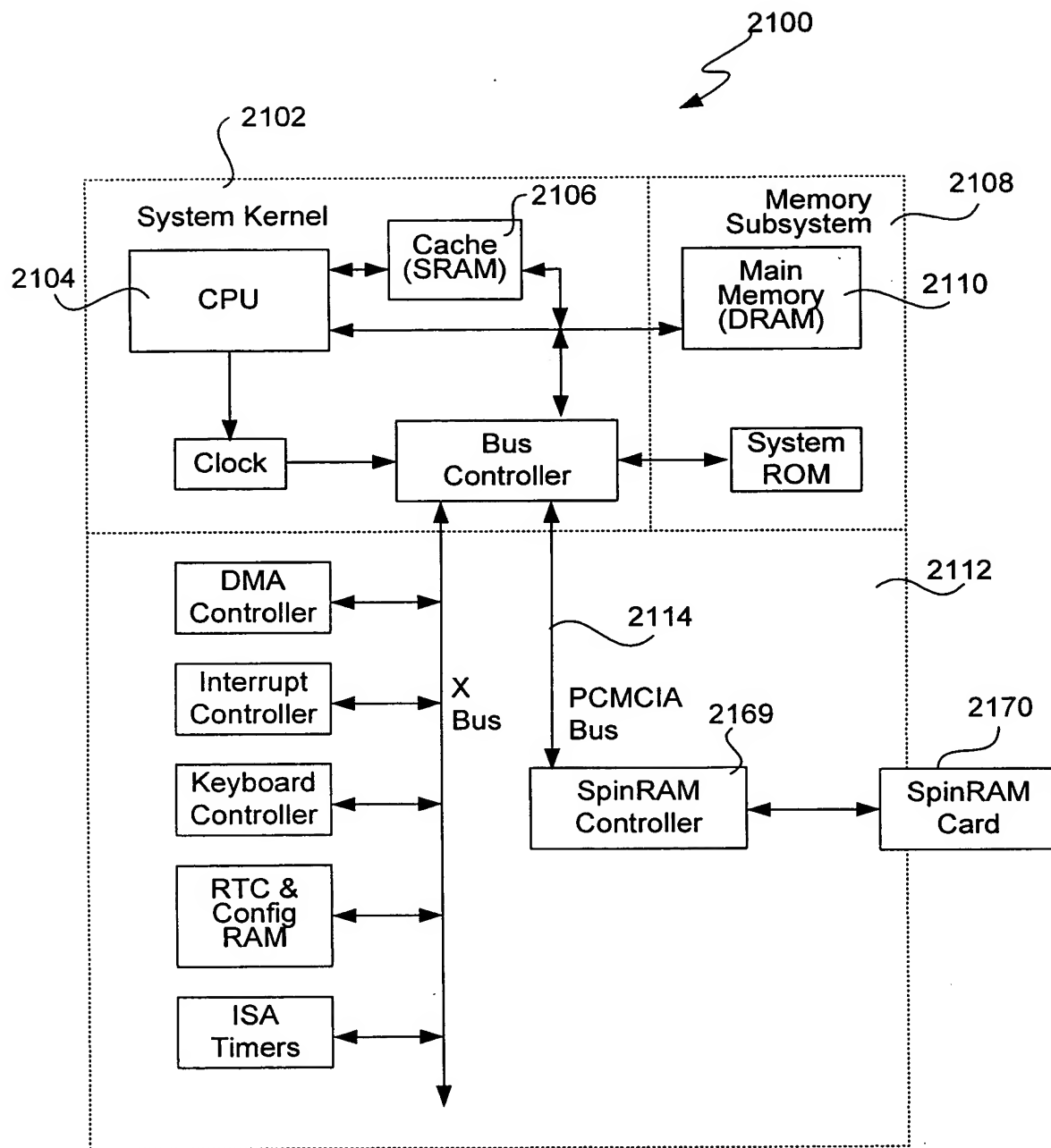


FIG. 21

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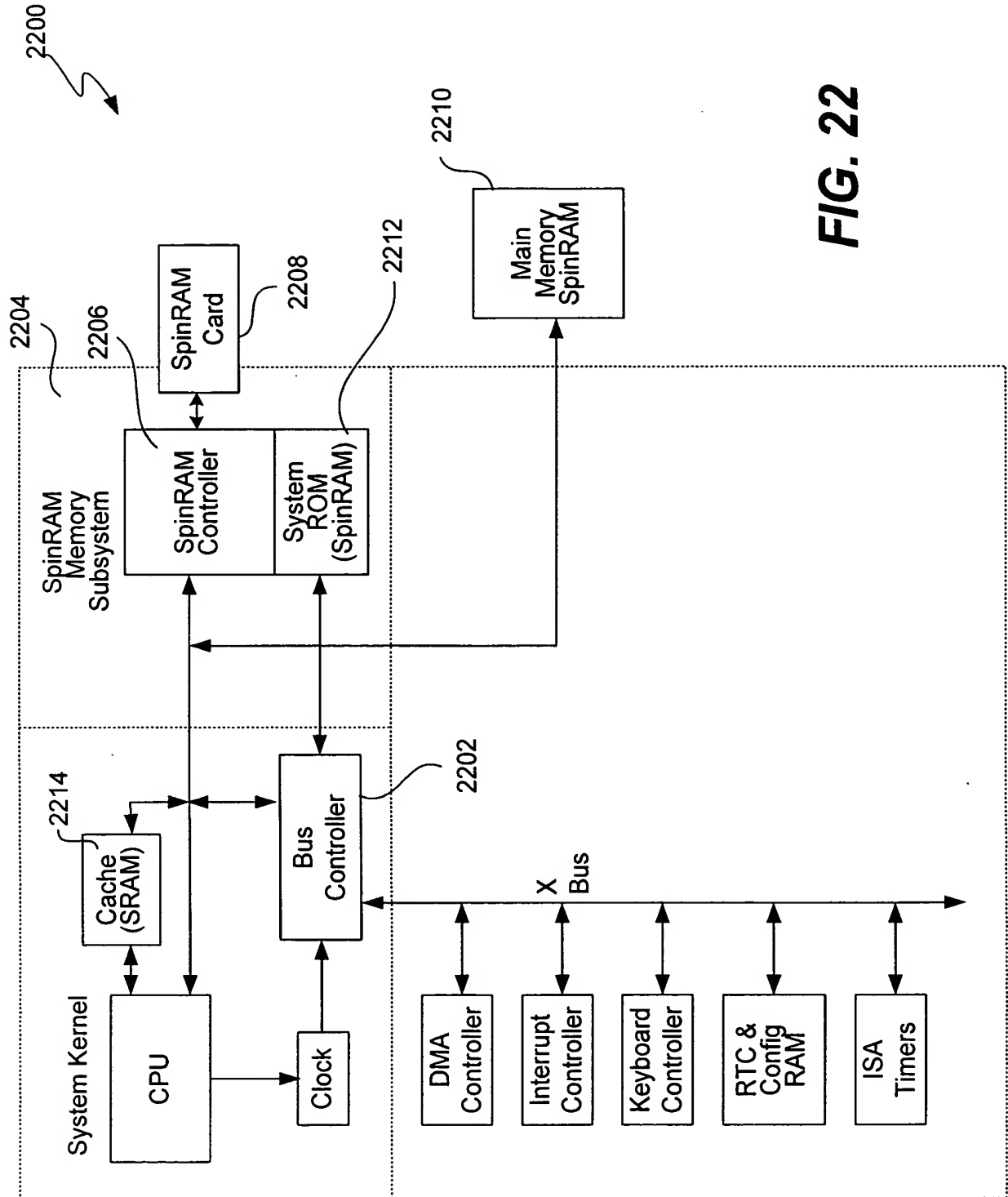


FIG. 22

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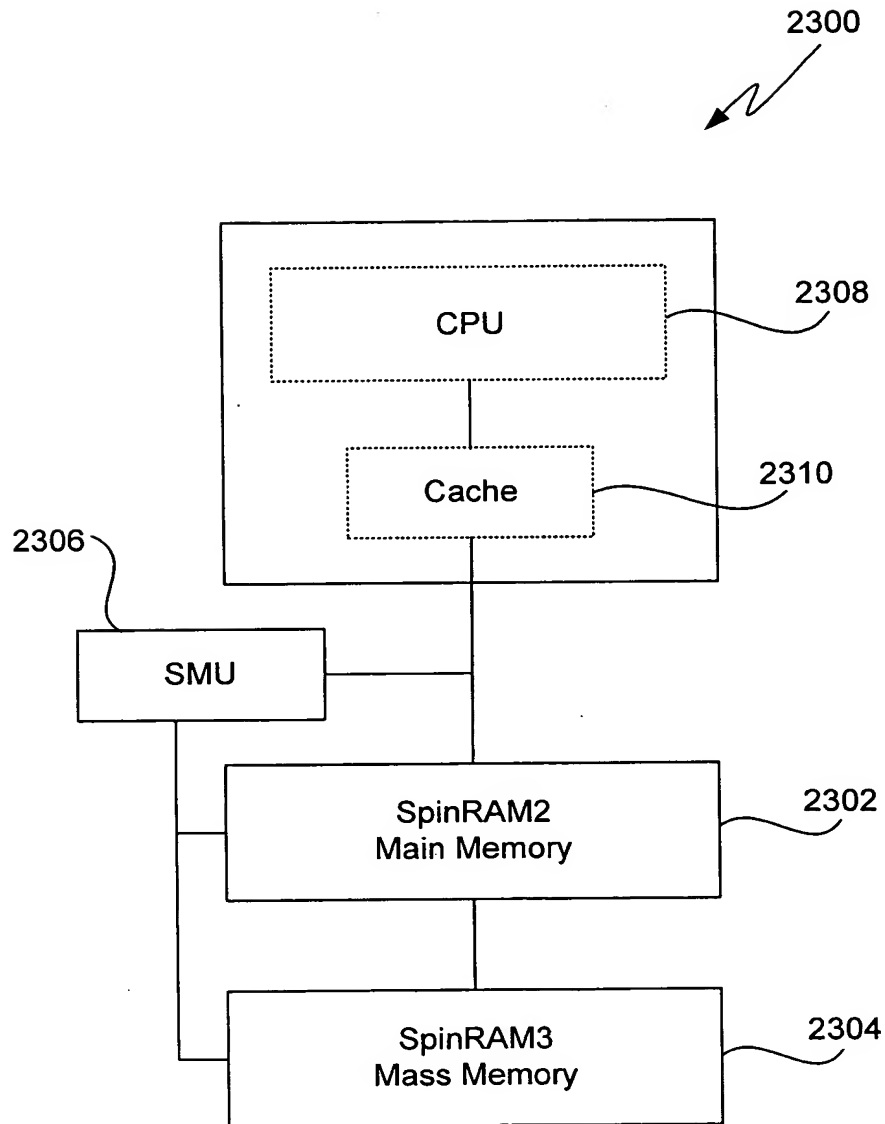


FIG. 23

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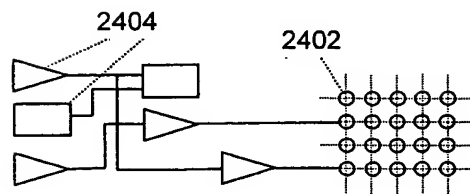


FIG. 24

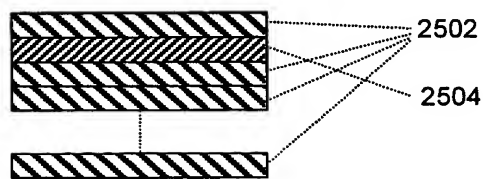


FIG. 25

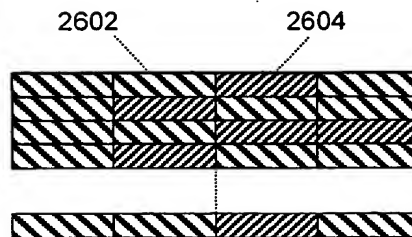


FIG. 26

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FIG. 27

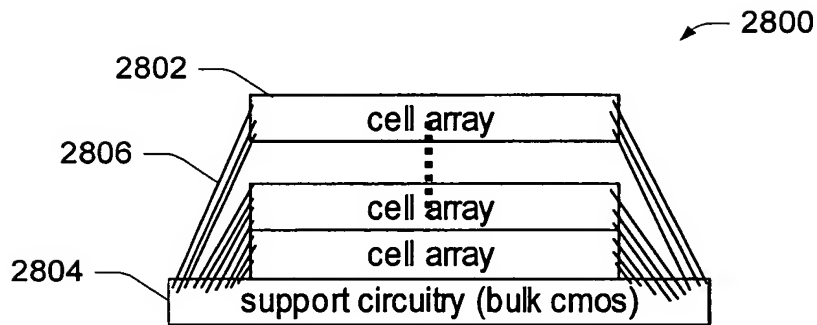


FIG. 28

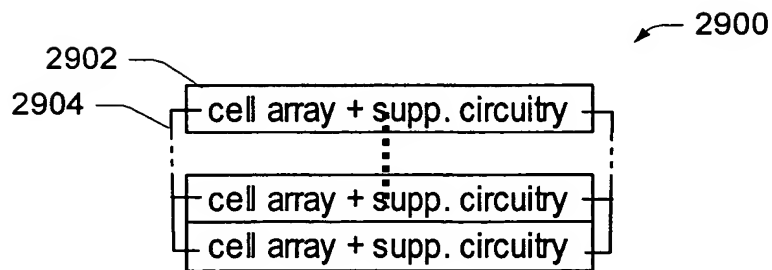


FIG. 29

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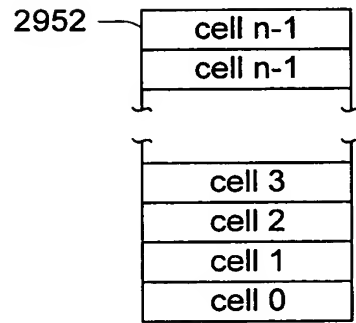


FIG. 29A

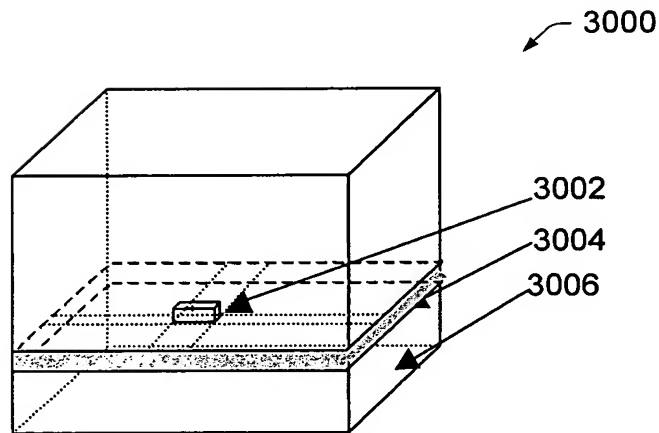


FIG. 30

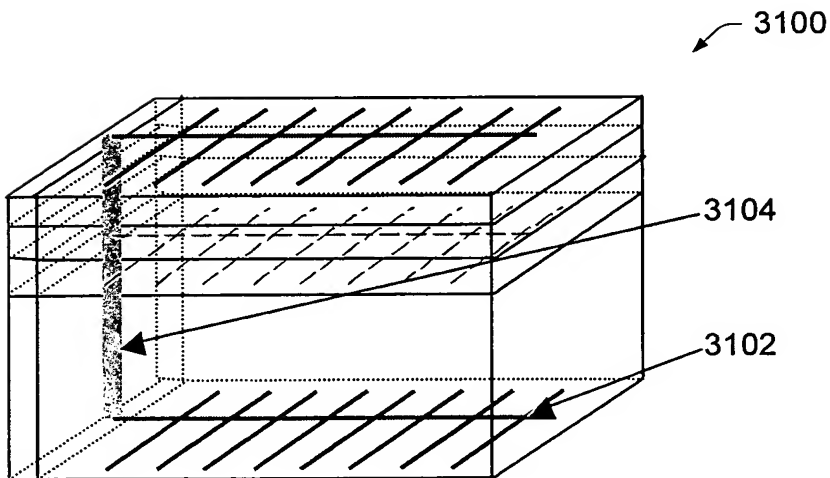


FIG. 31

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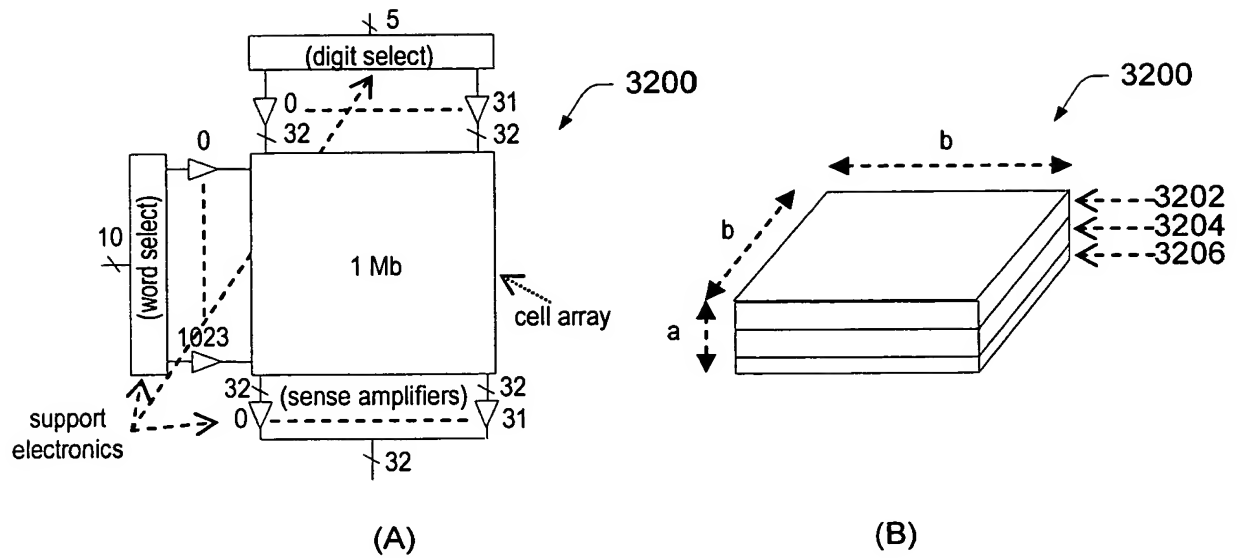


FIG. 32

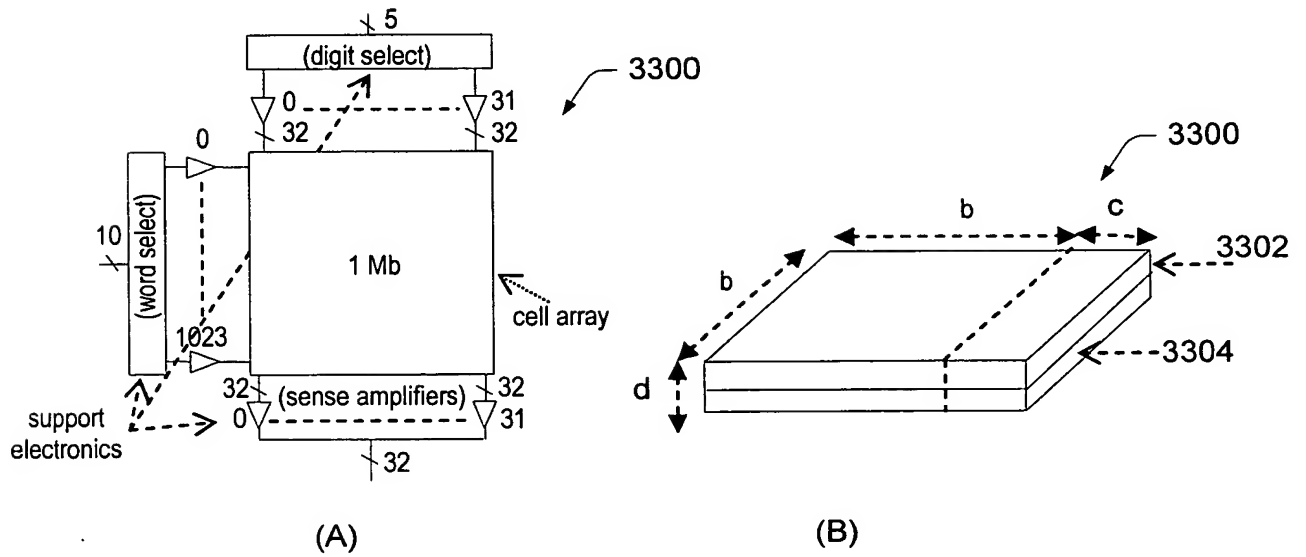


FIG. 33

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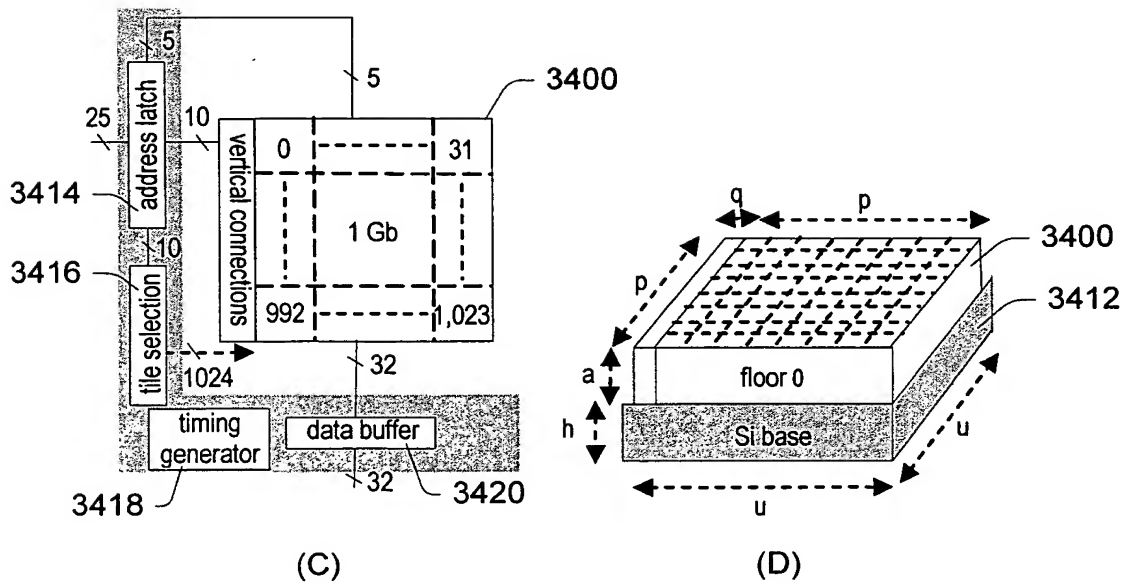
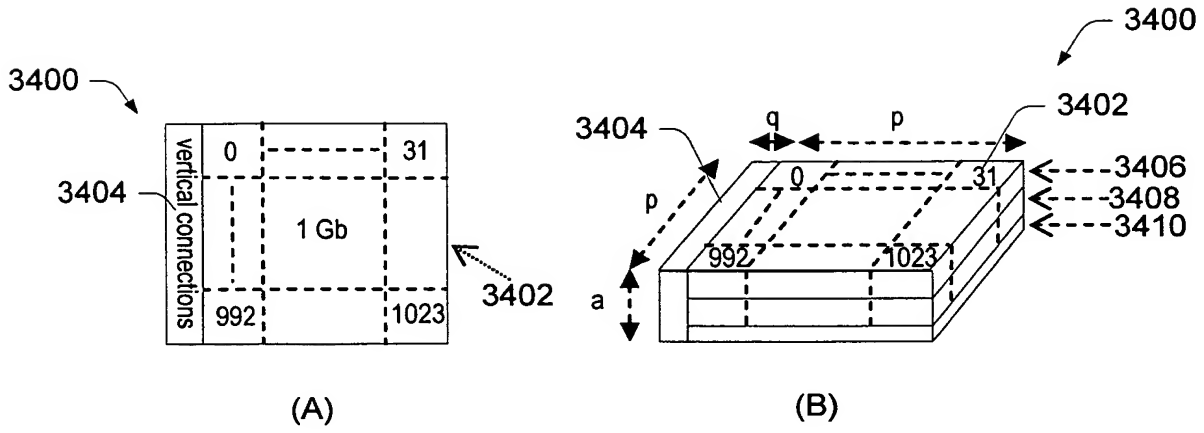


FIG. 34

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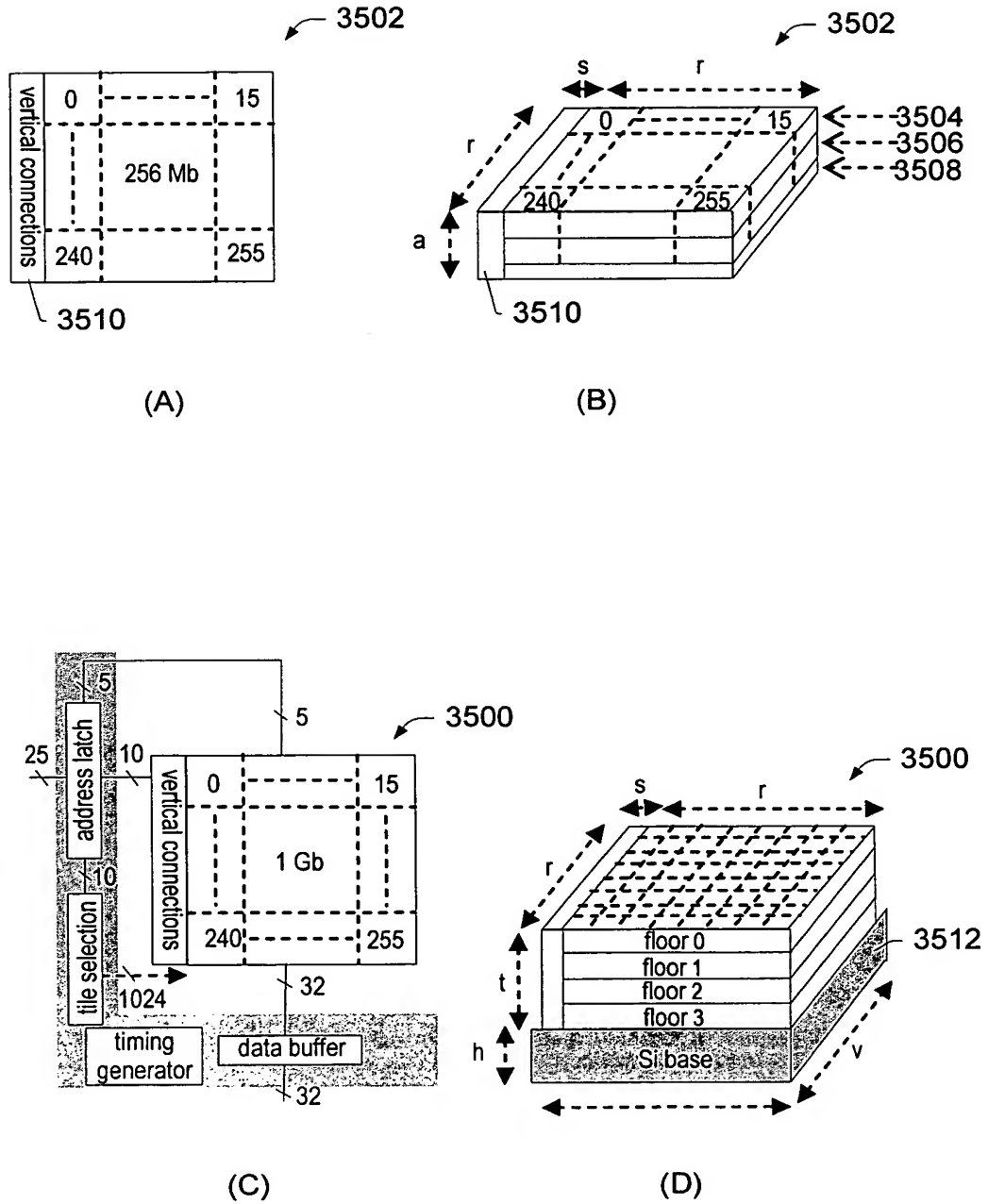


FIG. 35

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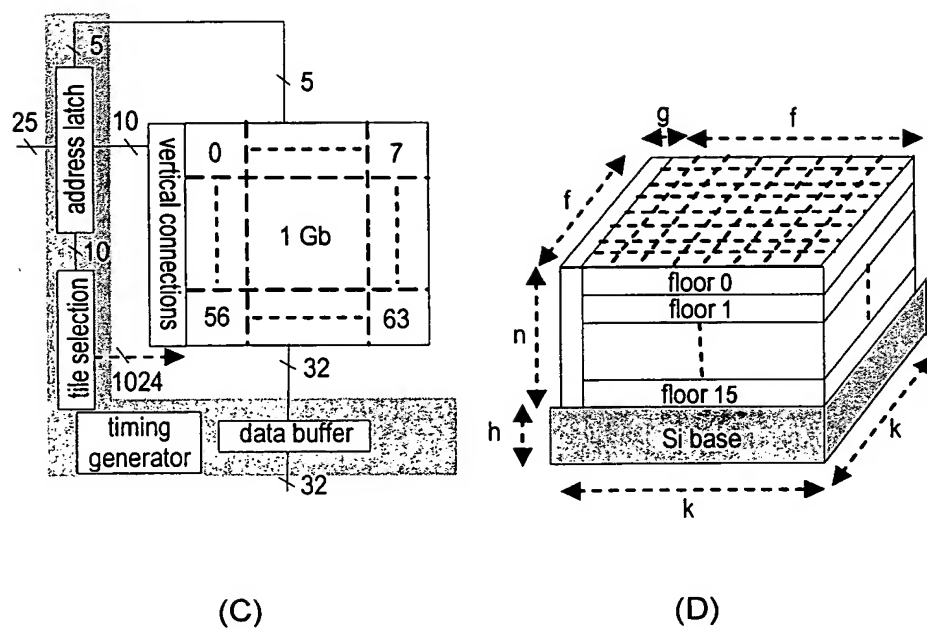
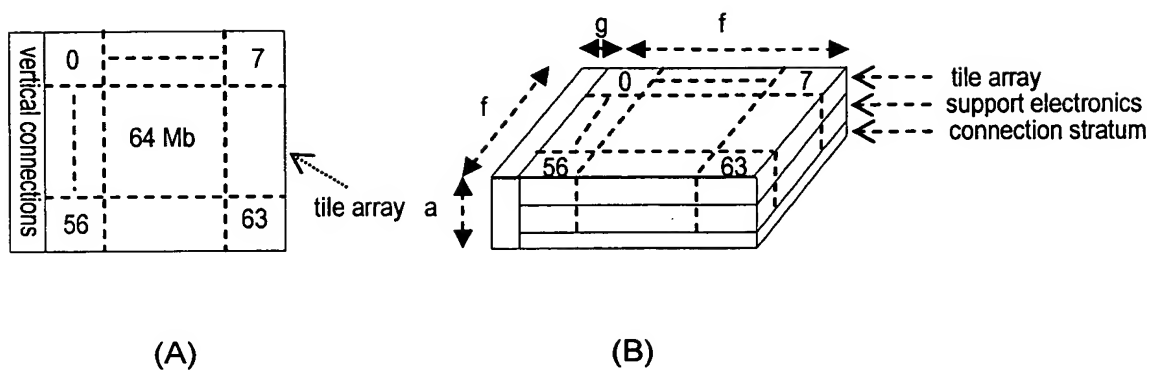
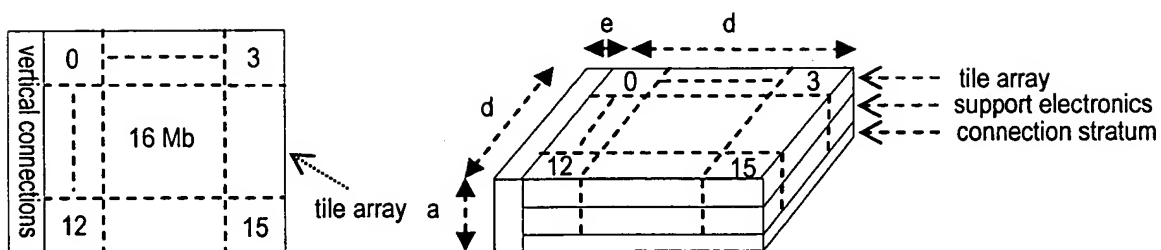


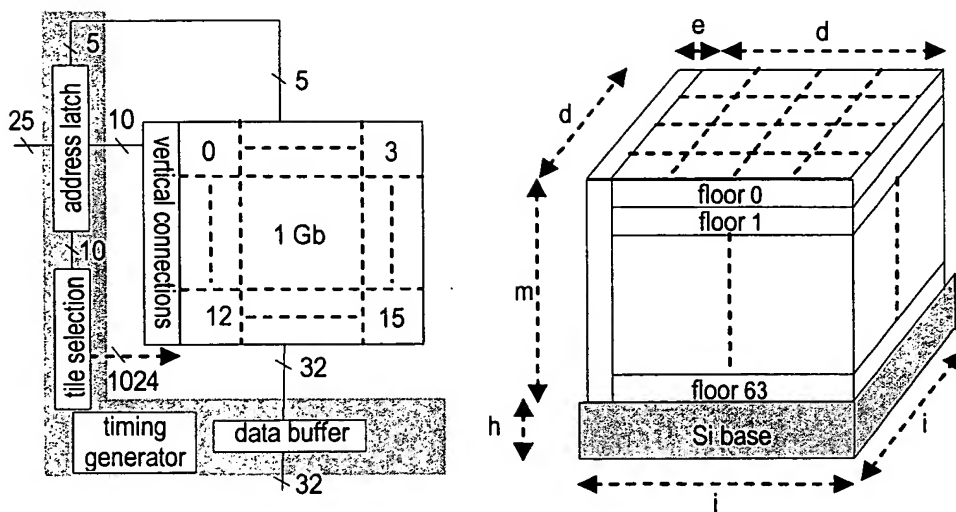
FIG. 36

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(C)

(D)

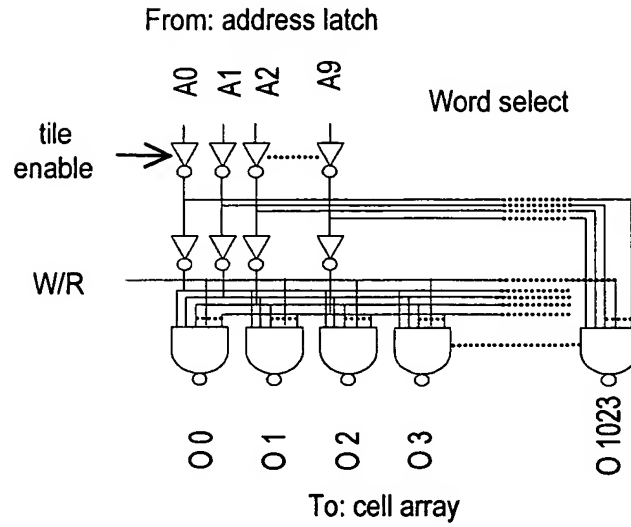


(C)

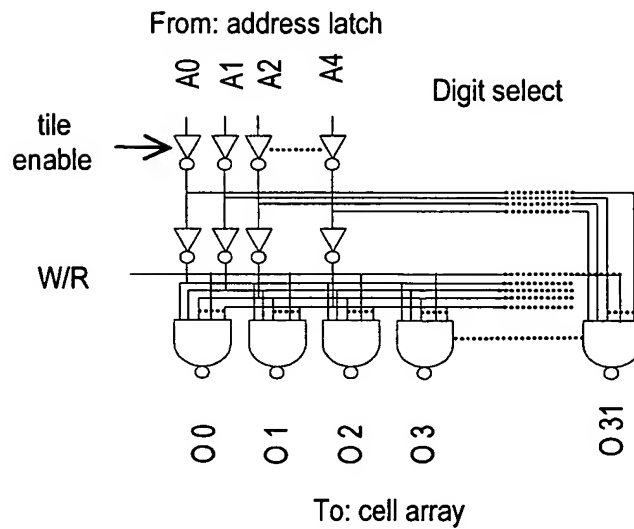
(D)

FIG. 37

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(A)



(B)

FIG. 38

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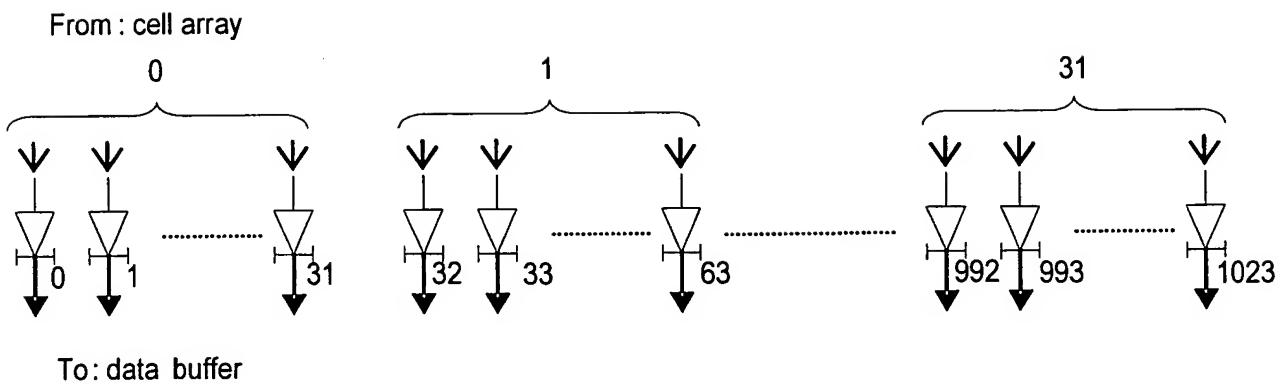


FIG. 39

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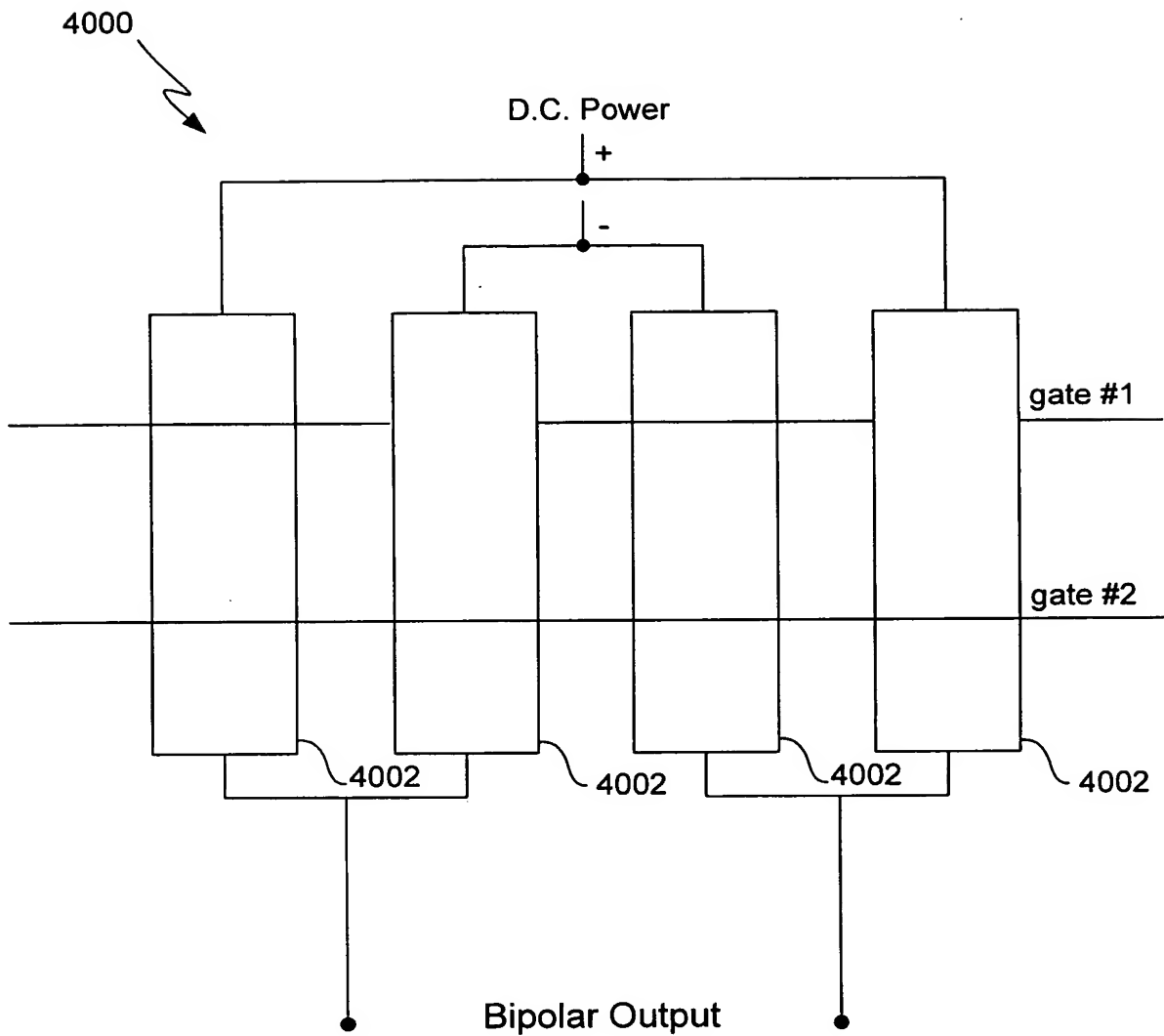


FIG. 40

XOR gate 4100

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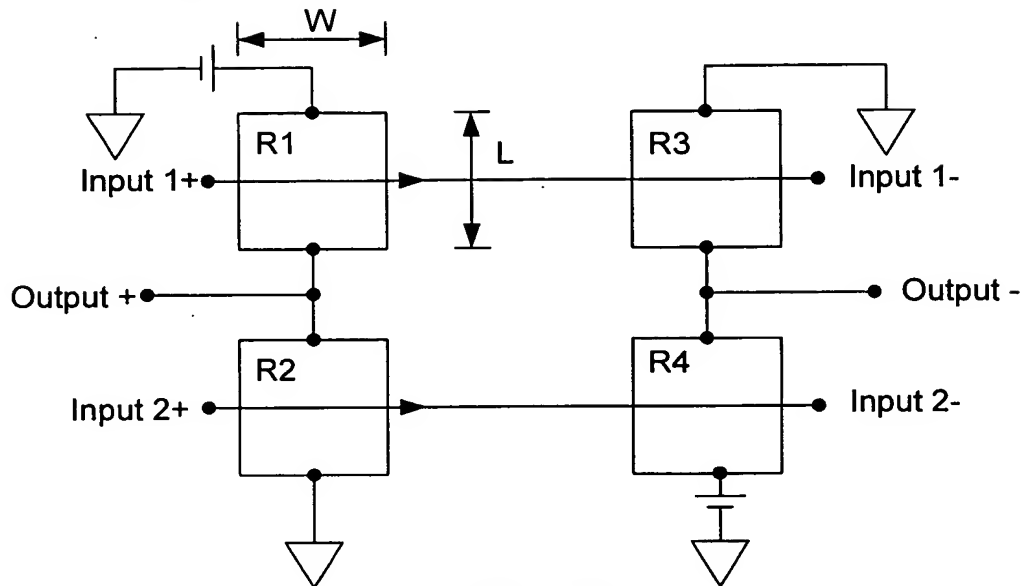


FIG. 41

AND gate 4200

OR gate 4250

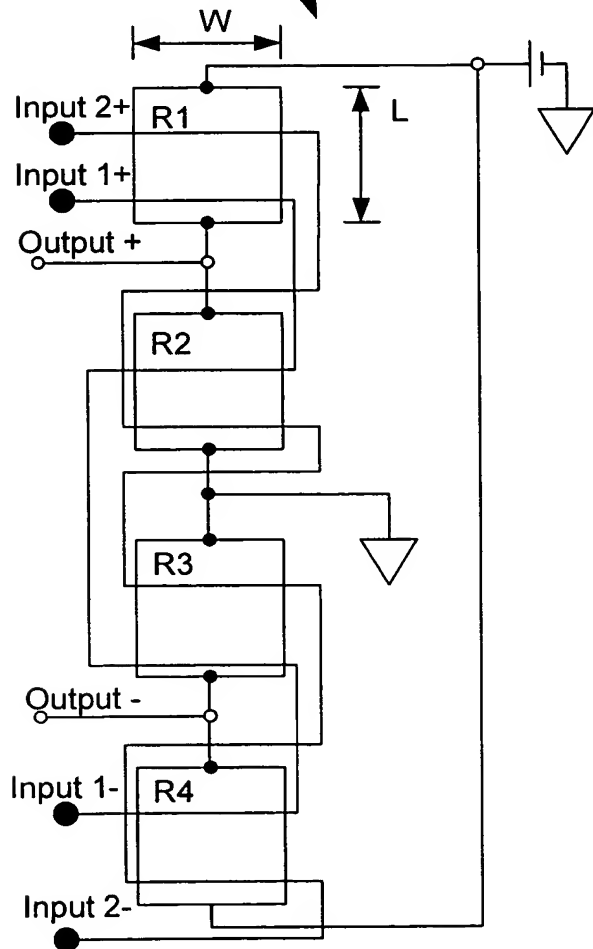


FIG. 42A

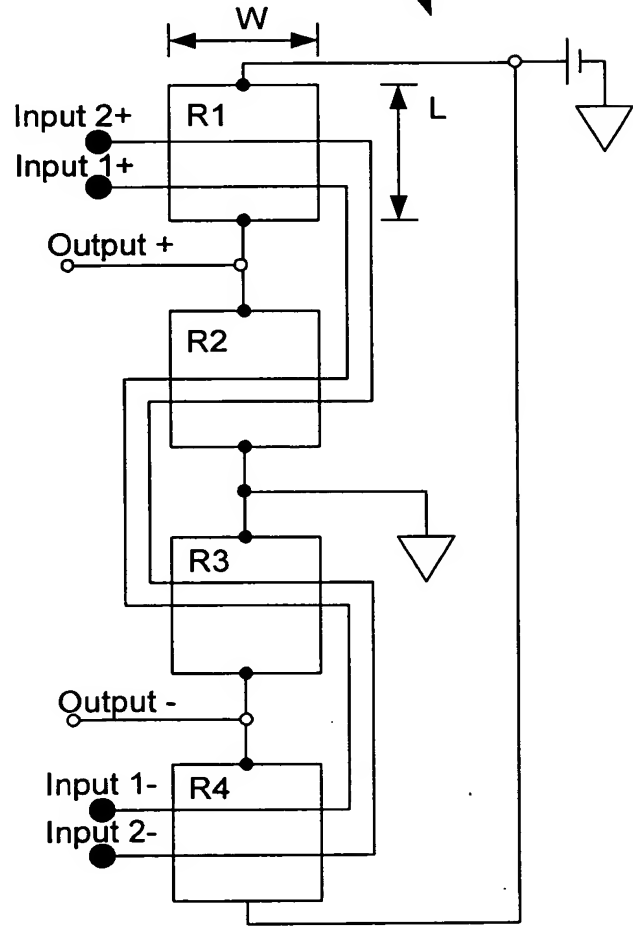


FIG. 42B

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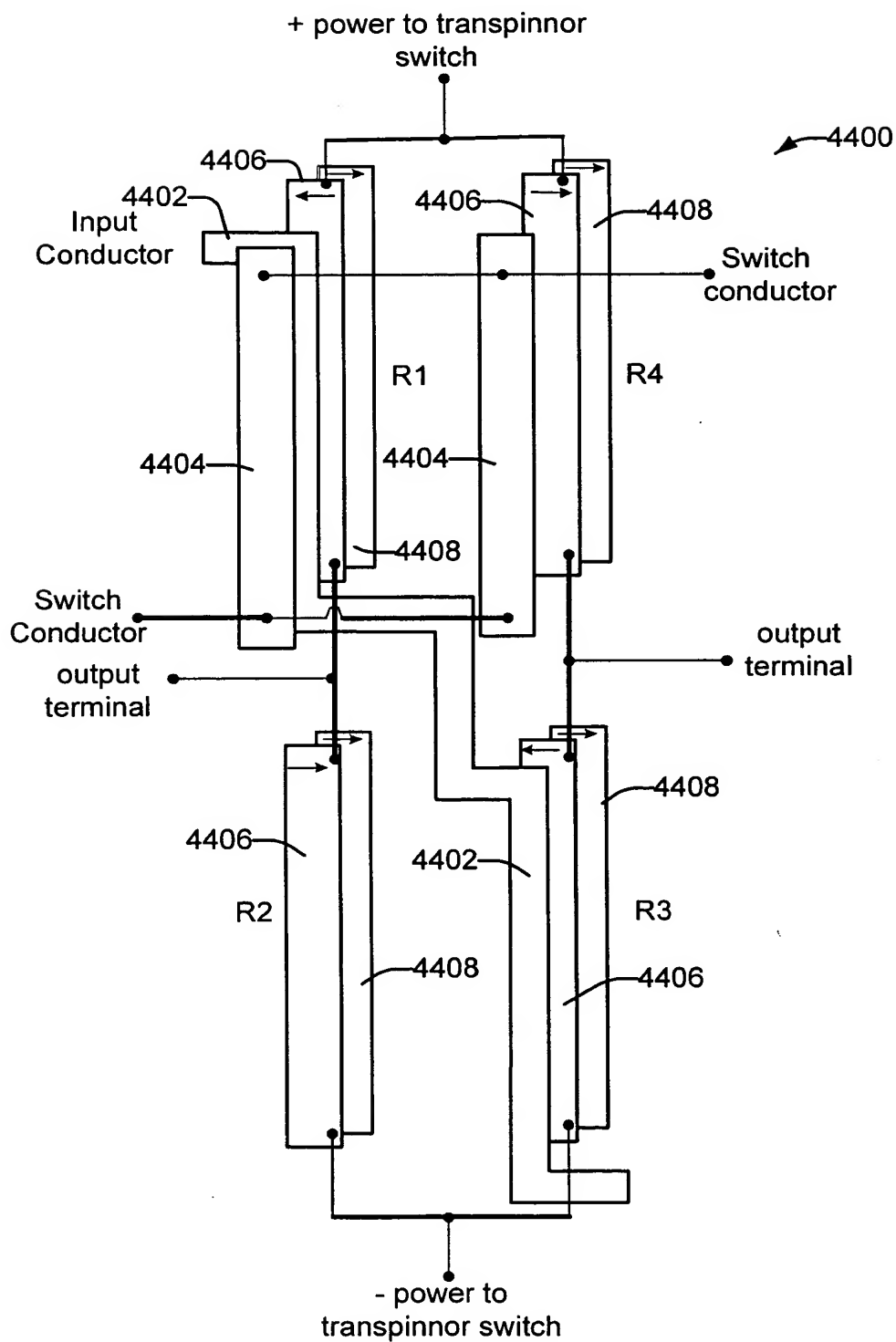


Fig. 44a

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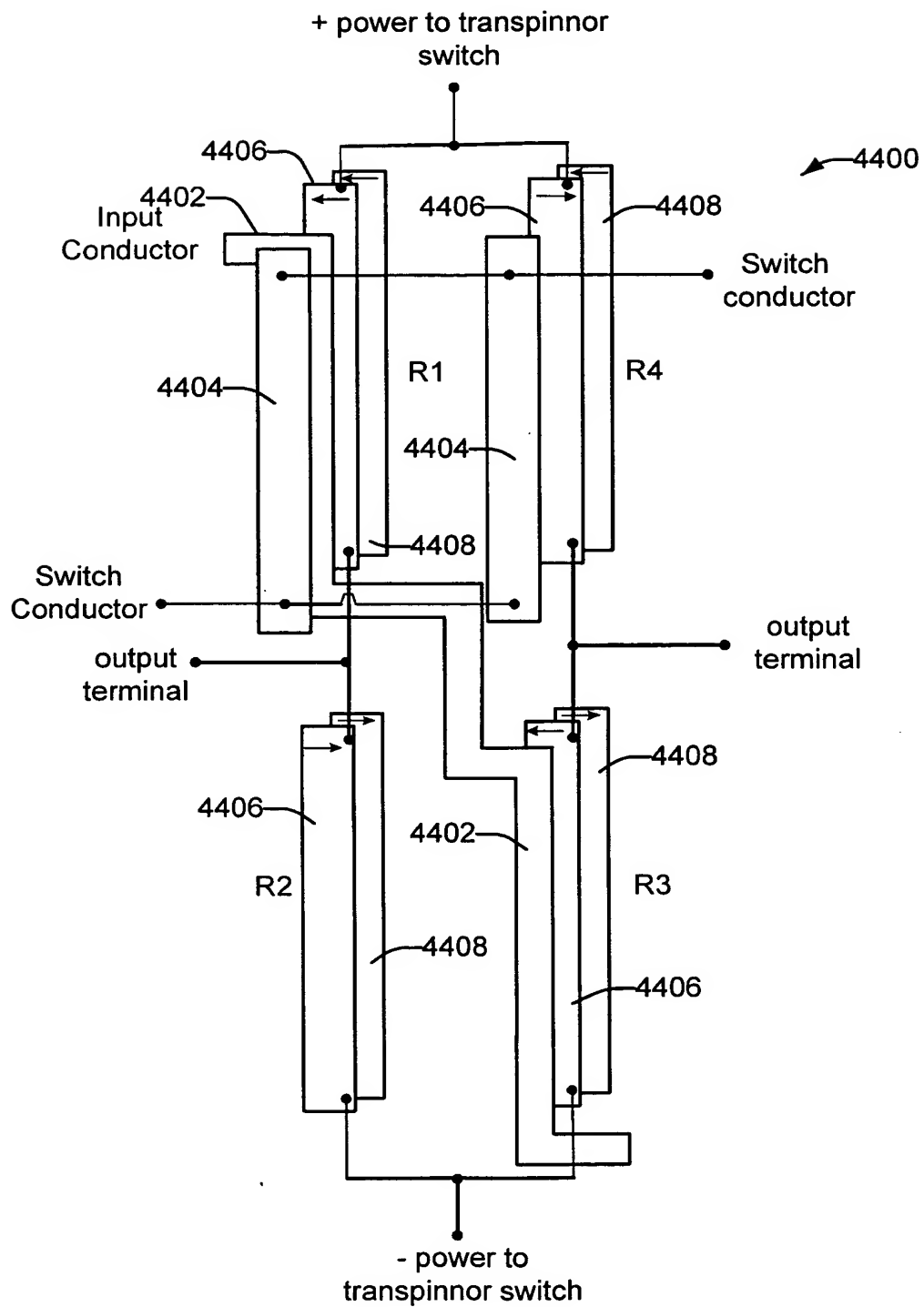


Fig. 44b

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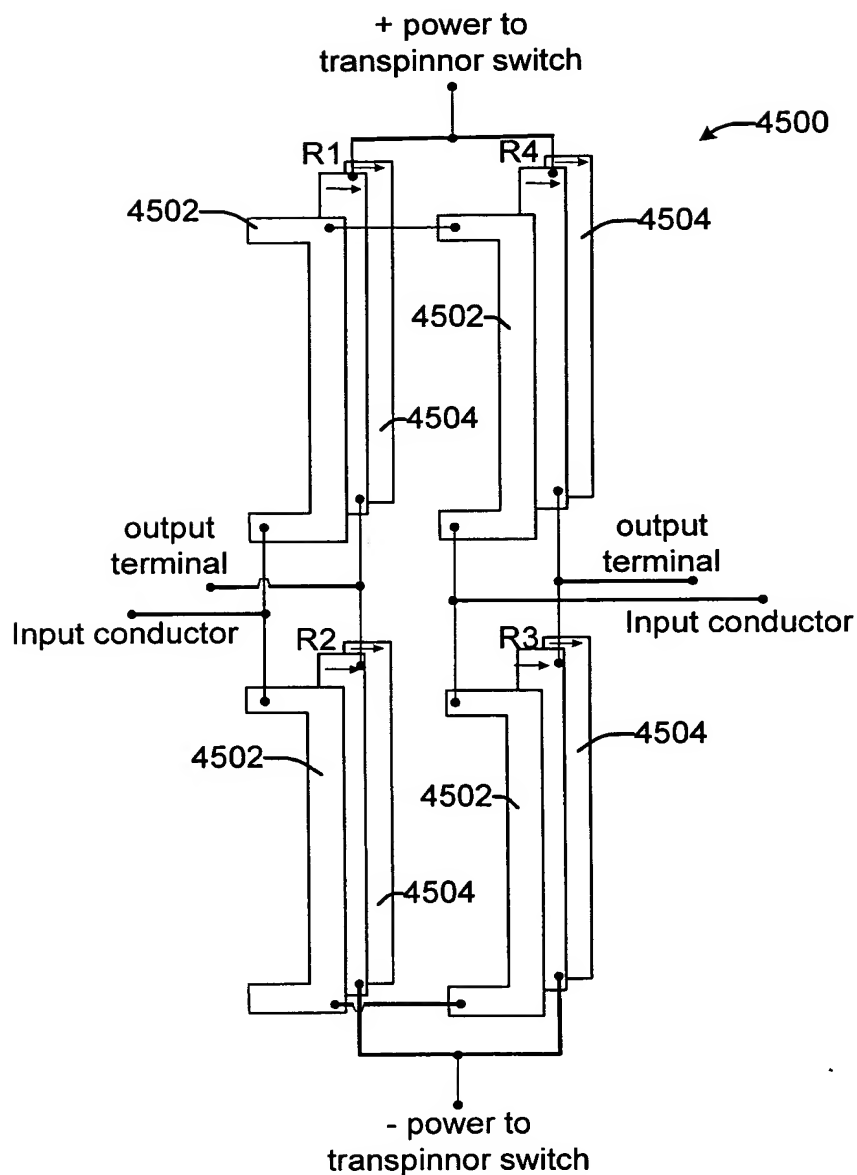


Fig. 45a

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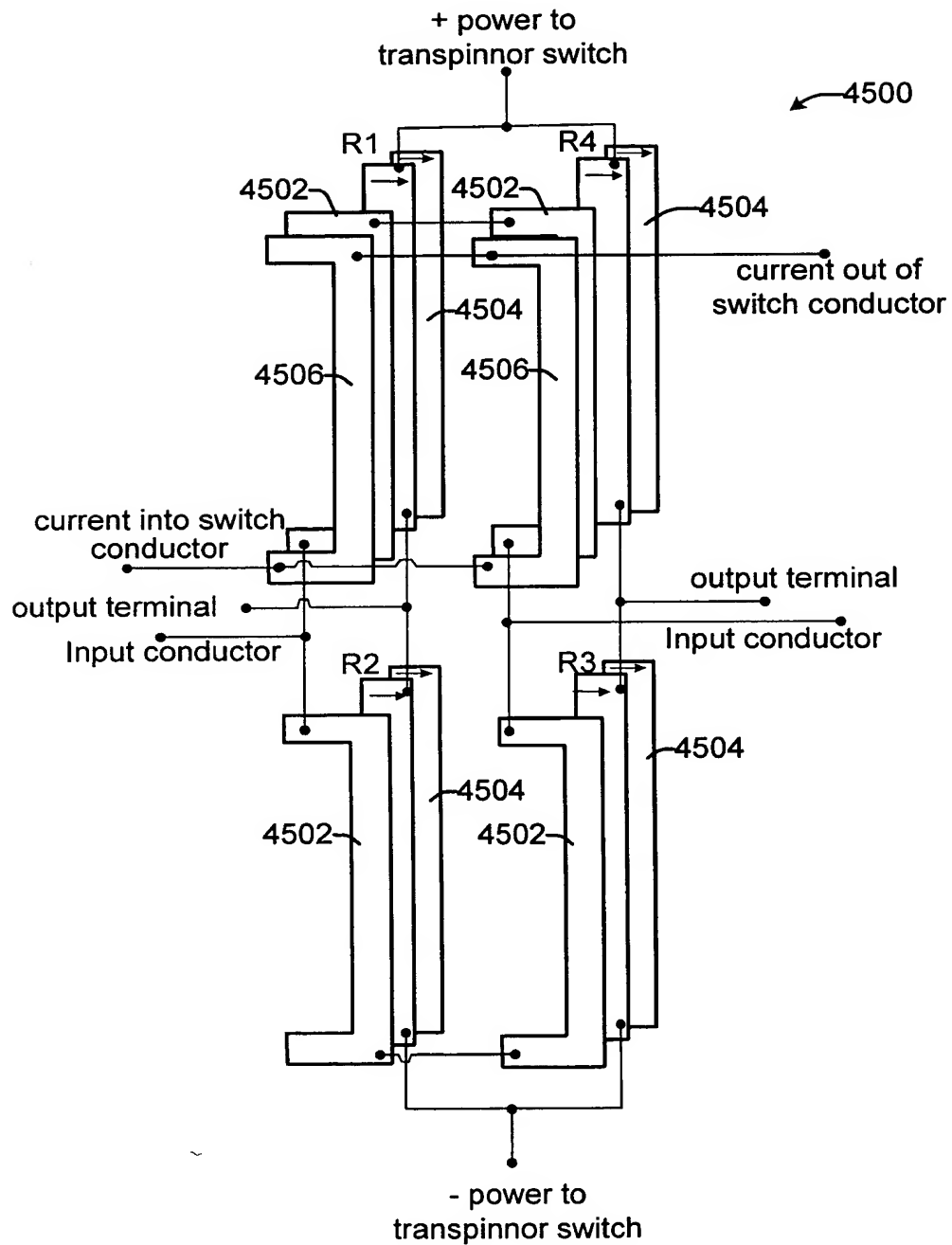
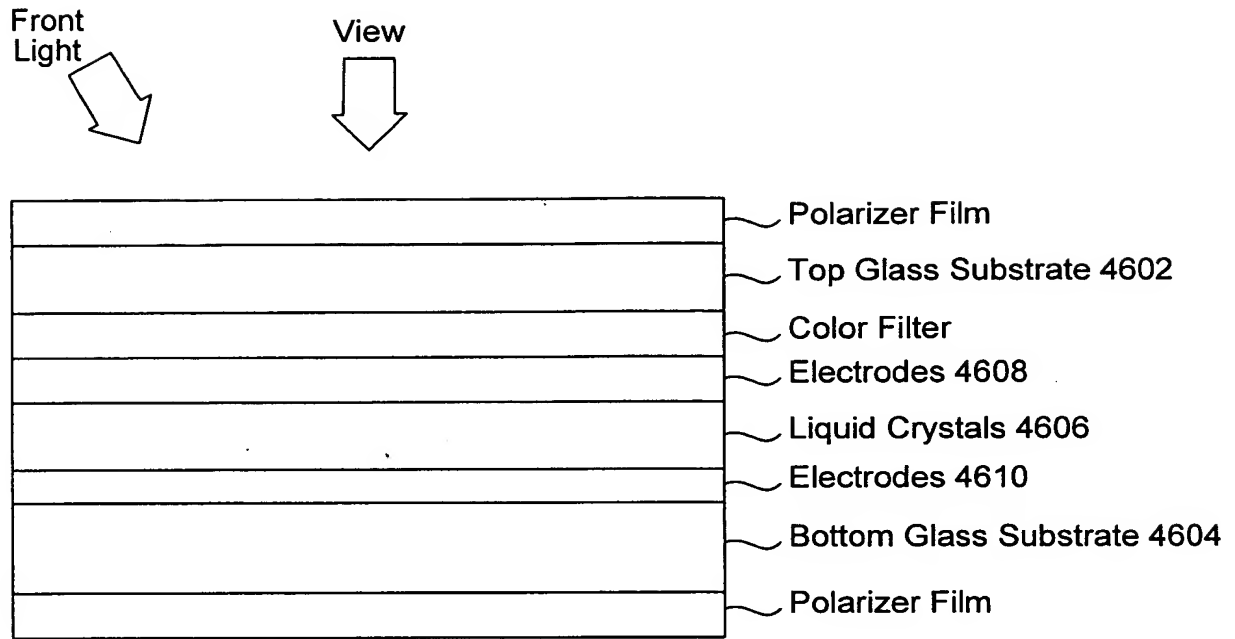


Fig. 45b

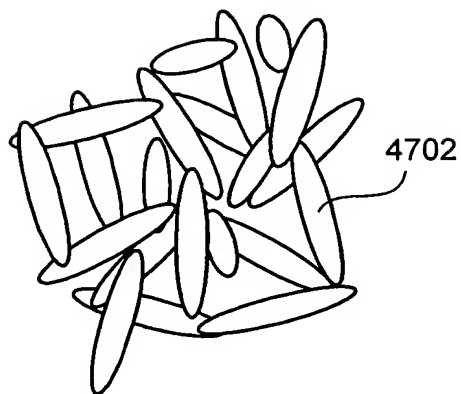
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Cross section of typical LDC.

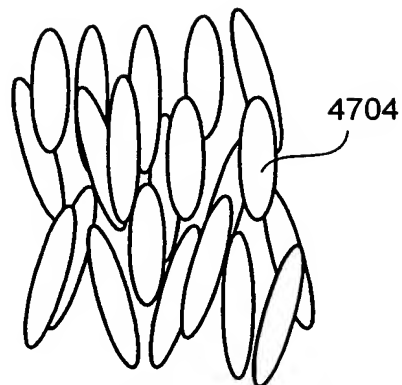
FIG. 46

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**Liquid crystal molecules,
in isotropic phase, with no electric field,**

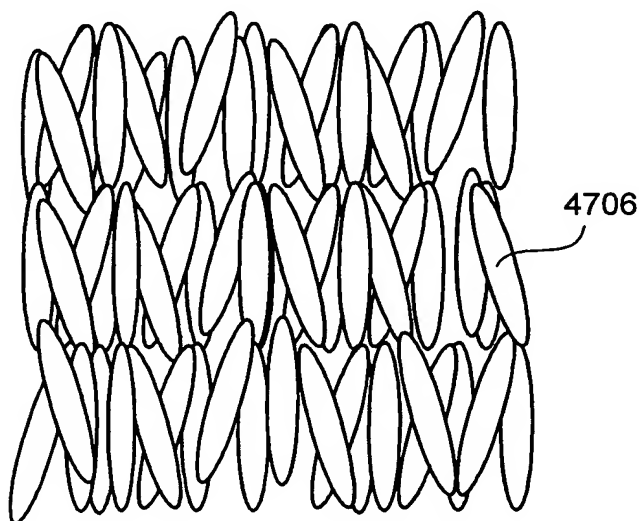
(A)



**Liquid crystal molecules, in
nematic phase, under applied
electric field.**

(B)

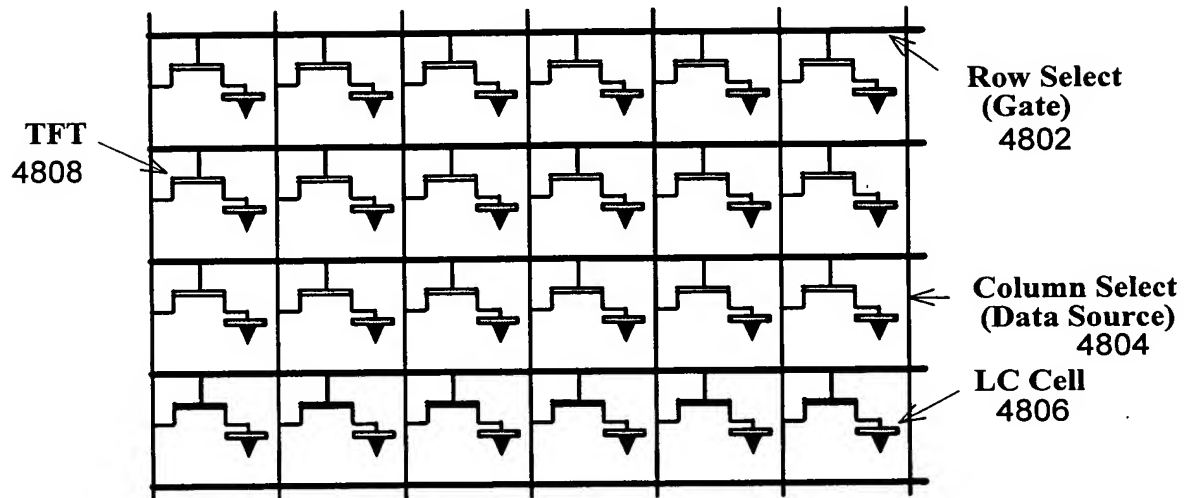
Liquid crystal molecules in smectic phase, under applied electric field.



(C)

FIG. 47

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Schematic of TFT active matrix pixel array

FIG. 48

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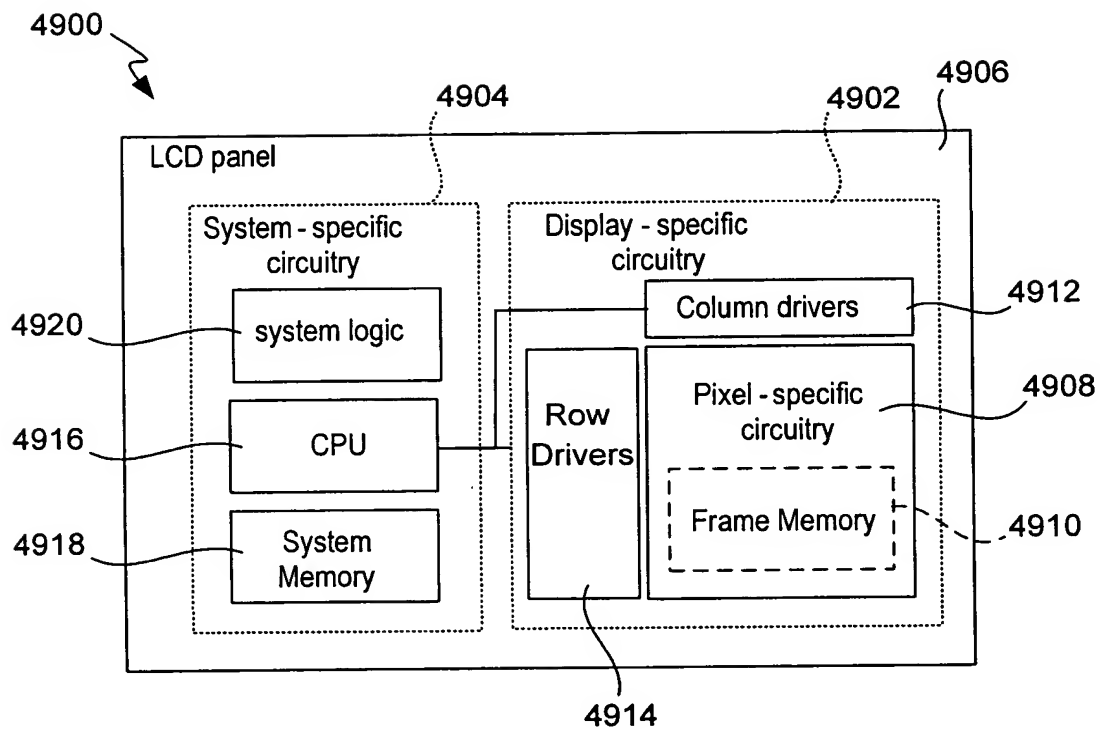


FIG. 49

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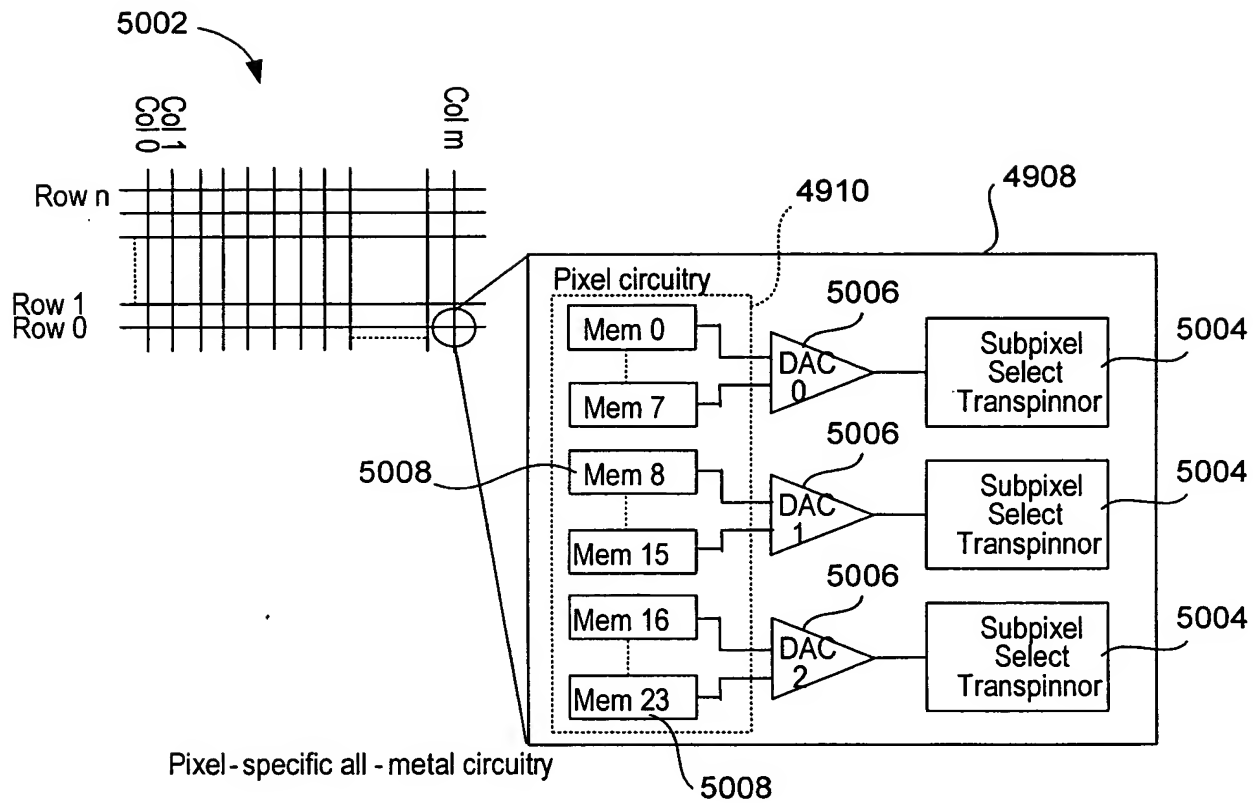


FIG. 50

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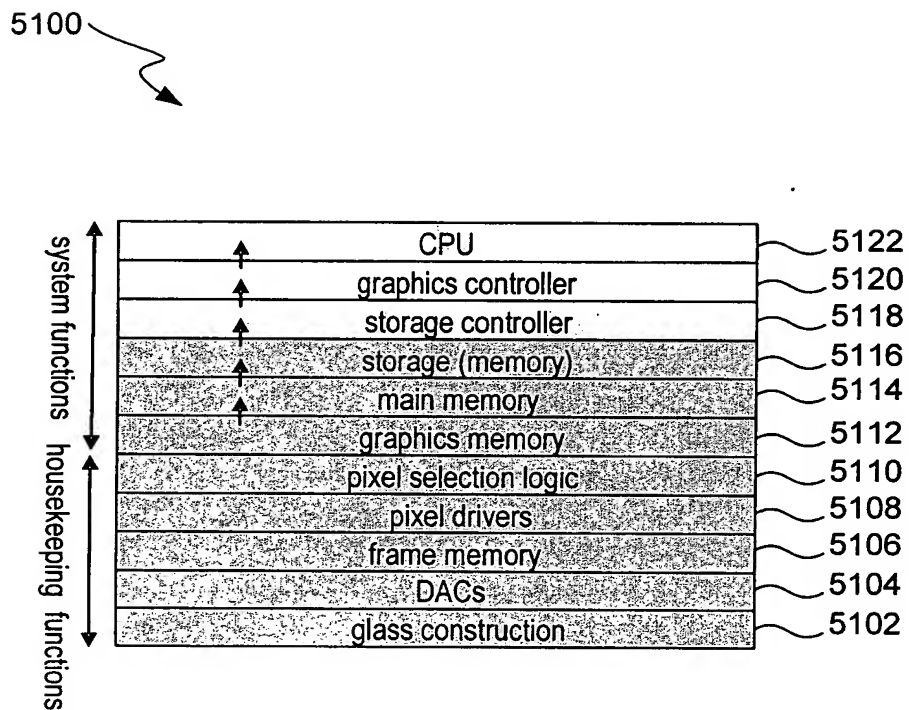


FIG. 51